

NNUAL CONVENTION

FEDERATION OF ARCHITECTS, ENGINEERS, CHEMISTS AND TECHNICIANS BOOK-CADILLAC HOTEL, DETROIT, MICH., OCTOBER 7, 8, 9, 10

CALL TO CONVENTION .

This call goes out in answer to the challenge of modern times, of changing trends and conditions of which the technical professions have been forced to take heed to make new appraisals of their scientific and technological contributions, of their social relationships and economic needs.

This call is more than a call to our membership alone. It is an invitation to members of the technical professions and their societies to attend a series of extra-convention sessions on the important questions raised by the report, June 1937, of the Subcommittee on Technology to the National Resources Committee, appointed by President Roosevelt. These sessions, dealing with the social and economic aspects of technology, will endeavor to develop new understandings, policies and organizational forms necessary for immediate guidance and in anticipation of the future. What can the technical professions do through organized effort to secure the benefits of modern science and technology in relation to productivity and utilization of resources, human needs, employment opportunities and 'the abundant life'?

This call is an invitation to the study of organization, of the achievements, programs and plans of technical professional men and women who have organized for economic security, for unifying their efforts with those of others to secure improved working and living conditions.

This call marks the advance and preparation for further development by the FAECT which, after four years of achievement as an independent economic organization, has moved into closer cooperation and affiliation with the most progressive force of organized labor, the Committee for Industrial Organization. Our advances have been further marked not only by gains in improved salaries and conditions of work but in influence in matters of planning and legislation affecting both ourselves and society at large. We have signally succeeded in organization of the technical personnel in the mass production industries, in civil service and in professional offices.

Our efforts to improve professional and economic standards in all fields have been welcomed by the cooperation of other organized groups in many professions. The solution to our problems lies in further cooperation toward our common objectives. We therefore urge that you participate in this convention, hoping that out of this initial step will grow the basis for relationships and accomplishments of mutual benefit. You are cordially invited to attend our convention, to send fraternal delegates or observers, and to invite your membership to attend the special sessions.

> ROBERT MIFFLIN SENTMAN, NATIONAL PRESIDENT

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PEDERATION OF ARCHITECTS, ENGINEERS, CHEMISTS & TECHNICIANS

THE CHALLENGE OF TECHNICAL PROGRESS

THE THIRD NATIONAL CONVENTION HOUSING COMES OF AGE

OCTOBER 1937

THE Mail

A LETTER FROM SPAIN

Editor's Note. - There are several Federations members who are at present in Spain, serving the Spanish Government cause in medical and technical units. Below is reprinted part of one of the latest communications received from a member who is one of the founders of the Federation, an outstanding engineer and a leader in trade-unionism. The attitude of the State Department toward the Spanish conflict, makes it necessary to withold the writer's name. The letter, however, speaks for itself and for the cause of democracy.

"I thought in America, in my all wise egoism, that I knew what Fascism was, and when I contributed and attended anti-fascist meetings, I felt I had done my share. I have seen Fascism in action and I will never forget. Its atrocities are the reflection of abandoned evil, sadistic and inhuman. Oh I could write horror stories, but the very relating of them would be contaminating.

"The moon is up over a certain city. The lights are all out. It is quiet in the darkness. Women and children huddle together. The alarm sounds and unknown terror grips the people. High up in the moonlight sky circles the fascist bombers. Suddenly there is an everincreasing whine and a pressure that stuns the nerves. A split second of terrifying silence, and then the very earth is rocked with an explosion. This continued for three hours in the dark. In the brilliant patches of moonlight whole streets of workers homes are torn and blasted apart like paper, and women and little children mutilated horribly, with eyes gazing sightless towards a forgetful divinity. Terror rides the night in the air. Up in the cold bright moon, the drone of the plane. Death, terror and fascist civilization rained down on a civil population for the glory of a 'free Spain'. I saw this place and the poor dead in the sun next morning. I heard the fascist clown, Quiepo de Llano, the radio maniac say over the radio the following night that the attack on ---- was a glorious 'victory' and many reds were killed.

"Many such victories stud the fascist crown. I know what fascism is now, and no subject in the world today is of more importance. It involves the matter of life and death of any and all Democracies, no matter how imperfect they may be. It means the perpetuation of civil liberties, the very existence of our trade unions and what they stand

"If you don't want to see fascism triumphant, build the union at all costs. The unions are the backbone of the fight for liberty. That can be your contribution in the fight for your own welfare and for the cause of humanity itself."

A WIRE FROM MONTANA

"Regret exceedingly my inability to be speaker on Question of Civil Liberties at your annual Convention. I sail from New York October 6th with Congressional Commission to investigate Italian and German intervention in Spain this also very important to progressive cause. Express my sincere wishes to the delegates and my sincere hopes for a most successful Convention which will carry on the fight to secure and guarantee civil liberties to the laboring people of this nation. Best regards."

> Jerry J. O'Connell, Congressman from Montana.

To the Reader--

Bulletin readers are urged to read and show to their friends the article on the opposite page dealing with present technological trends. The article illustrates ably the problems facing thousands of technical employees and apparently there are no immediate remedies to hand.

Inasmuch as these developments require thorough study and understanding, the Bulletin plans to publish in future issues, articles dealing with all important phases in technological development such as, the photo-electric cell, air-conditioning, welding, pre-fabricated homes, stratosphere air routes etc etc.

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THIS handsome pin, made of sterling silver and faced with blue enamel, is being worn by all Federation members. Your Chapter will supply you with yours for fifty cents, or you may order direct from the National Office, 22 East 17 street, New York, N. Y.

The NATIONAL BULLETIN is published monthly by the Federation of Architects, Engineers, Chemists and Technicians, at the national office, 22 East 17th Street, New York, N. Y. Richard W. Owen, Editor. The NATIONAL BULLETIN aims to keep all technical employes informed of developments in their profession of a cultural or economic nature. All readers are invited to submit articles, photographs or correspondence that they consider of interest. Articles should be brief and typwritten on one side of paper, double spaced. Single copies of the NATIONAL BULLETIN are 15 cents, yearly subscriptions, \$1.50. Advertising rates on request. Applications for entry as second class matter is pending.

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FEDERATION OF ARCHITECTS, ENGINEERS, CHEMISTS & TECHNICIANS

(Affiliated with the Committee for Industrial Organization)

VOL. IV. No. 7

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October 7, 1937

THE CHALLENGE OF TECHNICAL PROGRESS

By Winston Van Name

There is a fundamental challenge to the technical man in the report on Technological Trends and National Policy prepared by the subcommittee on technology of the National Resources Committee. On the basis of this report the technical man must face the question of the social effects of his professional work and the question of his own future's wellbeing as a wage-earner.

Marcel Scherer, Federation national organizational director, and Milton Fischer, Washington organizer, read papers discussing the report at the convention of the National Technical Association held in Washington Sept. 3-5. The present discussion is based on those papers.

The implications of the report will be explored at the forthcoming convention of the Federation, and in reporting that convention and in other articles it is the intention of the Bulletin to devote considerable space to the subject. Expressions of opinion from our readers are, of course, welcome.—Editor.

MERICAN technical men have usually considered themselves benefactors of society. They have been told, and mostly they believe, that the structure of an industrial world has been built on their skill and their discoveries. Learning that a subcommittee of the National Resources Committee was preparing a report on the probable nature of future technological developments, they might have expected to be told of a better world to come-of drudgery eliminated, of more food, of decent housing, of better clothes for a nation that in spite of its wealth is still pitifully poor. They would have been wrong.

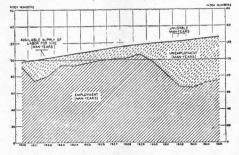
be well as we have the

A spectre haunts the pages of this report — the spectre of mass unemployment. Every example of increased productivity is a gloomy signal of trouble ahead. The sombre words with which President Roosevelt accompanied the report are perhaps the most cheerful in it:

"While it is certain that much of the unemployment caused by the march of technical advance is absorbed by new occupations born of new industries, it is equally true that in the meantime labor may pay a very heavy price through the readjustment and adaptations necessary on the part of workers whose jobs are affected by change."

How heavy that price is, is revealed in some detail in the report. It is perhaps no surprise to learn that during the depression a study made by Katherine DuPre Lumpkin of 300 textile workers displaced between 1929 and 1933 by the moving or merger of New

FIGURE 1
ESTIMATES OF SUPPLY OF LABOR FOR HIRE, EMPLOYED AND UNEMPLOYED. 1920 - 1935
(TOTAL SUPPLY FOR 1820-199)



England factories, showed that in 1934 well over half were still unemployed. It is significant also that of those reemployed three quarters suffered reductions in full time weekly earnings, some losing as much as 70 per cent.

Several studies are available, however, of the effect of technologic unemployment during good years. A study of 1,190 rubber workers in New Haven and Hartford displaced in 1928 by the



shifting of production to more efficient plants showed that at the end of 11 months, 3 per cent were still unemployed. The average time lost per man was 4.3 months. Moreover, two thirds of those re-employed were earning less than before; average annual earnings fell almost 50 per cent. Of 370 Chicago clothing cutters displayed beween 1919 and 1926 as a result of changes in the manufacturing process, 7 per cent were still unemployed in 1928 and the average period of unemployment was 5.6 months.

Mass Unemployment

The fundamental question of course is whether new industries do in fact, under conditions of constantly accelerating technical advance, even ultimately replace the employment opportunities lost through mechanization. In Fig. 1 the top line, available supply of labor for hire, has been adjusted by an estimated 21/2 per cent to cover normal unemployment due to illness, vacations, labor disputes, etc. It will be seen that even during the relatively prosperous years, 1923-29, a considerable body of unemployment, 10-15 per cent, was carried along. During the period of rapid recovery from 1933 to 1935 the employment line tended to rise barely faster than the line of available labor. giving little reduction in the nearly 10 per cent unemployment. Incidentally. it should be noted that the chart, being plotted in man-years rather than manhours, is automatically adjusted for employment gains due to reduction in the length of the work-week.

New Inventions

The upper line includes only labor available for hire and takes no account of those who work on other bases, large-

Continued on next page.

Continued from preceding page.

ly in agriculture. Now one of the thirteen inventions which the report picks out as likely to be of dominating importance in the next ten or fifteen years is the mechanical cotton picker, and another is tray or chemical agriculture. The exact effects of the second are difficult to foresee, though it is clear that by its increased productivity it will bring into the labor market many who are now small self-employed or tenant truck farmers.

The effects of the cotton picker are clearer. The report estimates that 3,000,000 to 6,000,000 members of Southern tenant families would no longer be needed in the production of cotton. In the words of the report: Would they pour into the North and seek employment in industry? If so, what would be the effect on organized labor, wages, and standards of living among both skilled and unskilled workers?

This immediate effect would be intensified by the fact that with the elimination of the necessity for the maintenance of a large labor force for picking, mechanization of other process of cotton growing would be accelerated. Also released would be the labor devoted to producing feed for the 5,000,000 horses and mules now used in the cotton states.

Rust Cotton Picker

The Rust cotton picker, most promising of the mechanical pickers now being developed, is at present artificially held off the market. The Rust brothers, its inventors, appalled by the dislocations latent in their discovery, are only permitting its introduction in an experimental way on a few cooperative farms and, on a larger scale, in Russia, where unemployment is not a problem.

But it is apparent that a sharp rise in the upper line of our chart is on the books for the near future as a mass of now self-employed or tenant workers come into the open labor market.

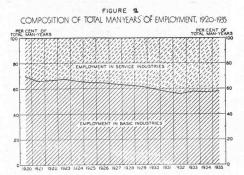
Of the other outstanding inventions discussed in the report, at least one, the electric eye or photo-electric cell, seems destined to cause much unemployment by taking over many sorting, grading and counting operations. The development of airconditioning, television and facsimile reproduction, the automobile trailer, and of steep-flight airplanes seems likely to create new industries and new employment opportunities.

Mixed effects are to be anticipated from the other new developments emphasized. Molded plastics, artificial textiles, synthetic rubber, prefabricated houses, and gasoline produced from coal will all unquestionably produce new jobs, but in each case they replace existing industries, with consequent displacement of labor and, due to the more highly mechanized nature of the new processes, a possible net loss of employment.

The writers of the report confess themselves unable to say whether under modern industrial conditions total production can expand fast enough to overcome the effect on employment of declining labor requirements and increasing labor supply. But what conclusions they are able to draw are not encouraging.

The growth in total output, they point out, from 1920 to 1929 was not sufficient to absorb all the available manpower; the result was a substantial volume of unemployment during this entire period. A much more rapid advance in production than occurred from 1933-35 would be necessary to effect any reduction in the present enormous mass of unemployment—and it is well-known than the rise between 1935 and 1937 was slower than in the preceeding two years.

On the basis of productive efficiency in 1935, production in 1937 would have had to reach a level 20 per cent greater than that in 1929 to reduce unemployment to the figures for that year and would have had to continue to increase at a rate substantially greater than the increase during the twenties. We all know that production has reached no such level, and, with the necessary percentage increase continually rising with the continual increase in technical capacity, there is no early possibility of reaching such a level.



The Service Industries

Much has been made in some quarters of the possibility that expansion of the service industries—trade, professional service, public service, and personal and domestic service—may provide jobs for those displaced by increased efficiency

in the basic industries—agriculture, mining, manufacture, construction, transportation, communication, and public utilities.

Thus the report says: The notable increase in employment which took place between 1920 and 1929 was due almost entirely to the rapid growth of service industries. Fig. 2 reveals that the percentage of the total jobs available in any year which were furnished by service industries rose from 30 per cent in 1920 to 42 per cent in 1935.

It is very doubtfoul whether the increase in the service industries will be sufficient to narrow the spread between jobs available and men available. It should be remembered that the employment curve in Fig. 1 includes service man-years as well as basic industry. In any case, can the technicians, trained and ready to build the foundations for a better life, reconcile themselves to becoming the beauticians and haberdashers of a world which must concentrate on luxuries because it cannot afford the necessities?

Is Planning the Answer?

The answer of the subcommittee on technology to the problems posed by rapid technologic progress within an economic system that appears to put definite brakes on industrial expansion is summed up in the word—planning.

Certain definite recommendations are made in the report. A series of studies of the outstanding inventions mentioned above are called for. A special committee is to be set up to study technologic unemployment. Revision of the patent laws is recommended, as is the setting up of machinery for adequate reporting of technical progress.

But the prime recommendation echoes President Roosevelt's call of last January for a National Resources Board—a central planning body to coordinate the activities of the 47 state planning boards and the 400 county and 1100 city boards now existing. The activities of this national board would presumably result in legislation to regulate the effects of improved technology.

Planning is unquestionably needed and will help. But is planning possible?

Under our system of production for profit industrial activity goes where profits are highest rather than were social usefulness is greatest. If it is more profitable to make munitions than pre-fabricated houses—munitions will be made. Between monopoly interested in charging what the traffic will bear

Continued on page seven.

A LETTER TO MY BOSS

By Daniel Stone

Dear Sir:

I know you are a busy man and don't have much time to worry about small matters, but there is something I've got to tell you. I would have told you in the office, only when I tried to see you today you were too busy. You were too busy yesterday, and also the day before. So you see I've got to write to you because I know you wouldn't want me to do anything behind your back, and I wouldn't want to, either, because I've been with the company long enough to know that this is one place where we don't have to work that way.

Of course, since we got all this new work and had to hire so many new men it isn't like it used to be in the old days when there were only a few of us in the drafting room and we could come in and talk to you any time. You weren't so busy then and I remember how you used to come out into the drafting room and chin with the boys. You used to do a lot of kidding and we all thought you were a swell fellow and would do anything for you. I remember once when a rush job came in and you wanted me to work overtime you told me you didn't know what the company would do without me. You said I was indispensable, sort of kidding, you know. But I could tell you sort of meant it too, and it made me feel pretty good. I stayed until midnight and finished the job so you could have it first thing in the morning.

I remember that night particularly because my wife was waiting up for me when I got home and she gave me an awful bawling out for staying out so late. What did I get for it, she wanted to know. The check wasn't any bigger at the end of the month, she said, no matter if I worked all day and all night. I tried to explain that it was only right for me to do a little extra now and then. Jobs weren't so easy to get then, and I told her I was mighty lucky the company kept me when they laid off so many of the other fellows. And besides, it wasn't as if I had to work overtime every night in the week. I never worked overtime more than once or twice a week except when there was a special rush job. And it wasn't as if you didn't appreciate it, I said, and I told her what you said about being indispensable.

Well, women just can't understand

such things. What do you think she said? All the graves from here to the Island of Papua are filled with people who were indispensable, she said. That got me pretty sore, but there's no use arguing with a woman, especially when she's your wife, so I let it go.

But don't get me wrong. In spite of the funny ideas she gets at times, my wife is a swell girl and I couldn't get along without her. She's a wonderful cook and the way she manages the two kids is really astonishing. And in spite of the complaining she does about my salary being so low and the price of everything going up, she manages on it somehow and even puts a little aside for a rainy day.

But what I started out to say was something else. It all happened when I was working overtime the other night. As usual, my wife waited up for me. The minute I walked in the door I could tell something was wrong because the room was full of smoke, and my wife rarely smokes unless she has something on her mind.

She told me a man from the union had been to see me and I asked, what union, because for a minute it had slipped my mind that this Federation of architects and engineers had been after me to join. She said it was the first she knew we had a union and she wanted to know why I hadn't joined it or at least told her about it. Well, I told her just what I told them, that I didn't see how they could help me, and besides, I said, I didn't think you'd like it. If we had any complaints at the office, I said, all we had to do is come and see you about them and you'd see what you could do about it. Anyhow, I said, I couldn't see where we had any complaints. So why pay dues to a union. Any how, I said, I was already paying dues to the Society, and that was enough.

Well, she just flew right off the handle. She said I never showed any consideration for her. Who was I married to, she wanted to know, her or the boss? It's the boss this and the boss that, and she could slave the year round and break her neck trying to stretch out the nickels and dimes and I didn't care a hoot.

I tried to tell her that wasn't so, and besides, I said, what has this got

to do with the union. Then she tells me about this guy she could have married if she wanted to who didn't even go through high school and now he's a bricklayer and belongs to the union and makes \$70.00 a week not counting overtime which is double time. And she gave all that up for a lousy college education and a soda jerker's salary, she said. And to boot, she says, she draws a husband with no more gumption than a jelly bean. Well, that got me pretty sore because I'm not as bad as that and we had a pretty hot argument about it. But the upshot of it all was that I went and joined the union the next night. I had to do something to keep peace in the family.

And that is what I wanted to tell you. They say they have most of the fellows in the office signed up and will come in to bargain in a few days. I know you've been busy lately, but you remember you promised us a raise when things picked up. Things have certainly picked up now, and if you hadn't been too busy to see me all along I would have come in and asked about that raise anyway. I guess the rest of the fellews feel the same way about it. So we might as well have the union speak for all of us at once. It will save you time that way too. I guess you would have got around to it yourself when the rush was over, if there was any business left after the rush, that is.

I thought I'd tell you this because I don't want to do anything behind your back. I know you'll understand, even though we don't get a chance to talk to you nowadays but have to see Mr. Brown, your assistant. I suppose it is about the same thing for us to have the union talk for us as it is for you to have Mr. Brown talk for you. It isn't like the old times, but as my wife says, new times, new customs.



COMMITTEE STUDIES CONSTITUTION

REVISION TO BE ISSUE AT CONVENTION

By Bernard White

A LTHOUH it has not been stressed in the call to the Convention of the Federation, the subject of revision of the Constitution will make up an important part of this meeting. General principles will be discussed and settled on the floor, but the final details will be threshed out by small committees toiling far into the night.

Why is a thorough revision of the National Constitution so important at this time? Because we are entering a new chapter in the life of the Federation. Our affiliation with the CIO, the launching of a nation-wide organizing drive, the very scope of the 1937 Convention are all indications of the Federation of the future. The organization of the hitherto almost untouched group of hundreds of thousands of technicians is our double responsibility, a responsibility to the great progressive movement of which we are now a part, and a responsibility to ourselves as technicians with influence and foresight.

Our organization has come of age, and our constitution must be revised, not merely to take care of the present, but to anticipate the organization of the future. In view of this, a letter summarizing the situation was sent to all Chapters by the National Resident Committee. Many replies have been received, and subsequent reports have been sent out for further discussion.

The most immediate and widespread response was in reply to the suggestion that we participate in independent political action as typified by Labor's Non-Partisan League and other truly progressive political groups. Quoting from the reply of the Philadelphia Chapter:

"It is recommended that our whole-hearted support be given toward the alignment of the Federation behind a progressive political party sponsoring labor legislation which is honestly striving to protect and further our civil liberties as well as increasing the economic security of the wage earner."

That such action is essential seems undeniable. Although the Constitution

in its present form was appropriate at the time of its inception, Federation activities and the whole progressive movement have developed to such an extent that it seems beyond question, correct to follow the action of the CIO in entering the political field.

(The urgency of decisive action is discussed most comprehensievly in Brother Richard Pollock's excellent article which appeared in the June Bulletin, page 14.)

Another suggestion eliciting considerable discussion was in reference to the formation of new chapters. The majority of the replies received concurred in the opinion that formation of additional chapters in a single city would be permissible with the approval of the regional council and the National Executive Committee. On the other hand, one reply suggested that there be only one chapter in a region, except under conditions agreed upon by the regional chapter and the national office.

Perhaps the most important questions which have been brought out in the discussion are in regard to the formation of various types of locals and to the admission of members hitherto considered ineligible for the Federation. We quote in part the comment of the Boston Chapter in reference to the suggestion that we provide means for setting up plant or industrial locals with provisions to take in all white collar workers where required by local union conditions:

"In many cases it will be found necessary to take in people who cannot be classified as white collar workers. This condition makes it advisable to include provisions for making industrial set-ups when and as, they become strategically necessary."

The Enlarged National Resident Committee on August 10th approved the suggestion of industrial locals with the provision that the non-technical members enjoy full privileges of the local but not of the Chapter. This has since brought a protest from the New York Chapter requesting a change, so that all members enjoy full member-

ship privileges. It is understood that in all cases where locals are formed including non-technical members, such action will be taken only with the approval of any other CIO union involved.

Already we are encountering situations in which it is necessary to extend membership in the Federation to people in the white collar and, in some cases, production groups, in order not to retard or nullify organization of technical people and to assist in furthering general organization.

One of the most difficult questions to solve is that of convention representation. With the transition from an organization of city chapters to an organization of office and plant locals a change from our present representation plan seems impressive. But can we say that within a year the chapters will be pratically supplanted by locals? At present we are working on a plan based on the following points:

- 1. A desire to give each regularly chartered local definite representation in the convention, and to encourage the formation of locals by giving chapters made up of a number of locals additional representation.
- 2. A desire to encourage the formation of new chapters in different cities by giving a small chapter convention representation in excess of a local of the same size.
- 3. A desire to prevent the domination of the convention by a single large chapter by means of a steeply graduated membership requirement for additional delegates.

Thus instead of going directly to the plan in use by the older and larger industrial unions of having representation based entirely upon the local union, we hope to work out a plan of first determining representation based on the portion of the chapter membership assigned to locals, and then counting the remaining chapter members in such a way as to meet the above conditions.

Many other details are under consideration for clarification and revision. A strengthening of the regional organization has been suggested, based on setting up permanent regional councils composed of members elected by the chapters of the region. Instead of a National Executive Committee made up of members from each chapter it seems desirable that this body be made up of the officers and the Regional Vice-President established by the Rochester Convention.

The objects of organization are being

rewritten to include the economic welfare of the members, furthering of industrial organization, maintenance of civil liberties and democratic government, encouragement of the study of social and economic aspects of professional activity, and the enactment of legislation to these ends.

Reports of the discussion and progress of the Constitutional Revision Committee have been sent out to all Chapters from time to time so as to obtain the benefit of all possible discussion

THE CHALLENGE OF TECHNICAL PROGRESS

Continued from page four.

and chaotic competition driving industry towards overproduction in the most profitable fields there is little possibility of planned production—especially when it is considered that industry has a real need for unemployment as a means of holding down wages.

President Roosevelt cannot control the bankers and industrialists, and they will resist by all means any plan that would reduce immediate profits. The fate of even such attempts as the NRA—essentially a move to guarantee profits—is evidence of this. Without centralized control, planning is impossible.

What is to be Done?

What course, then, shall the technician take? It is clear that he has a stake in the matter. As a citizen he is interested in the well-being of his country, and as a professional man he knows that he is among the first and hardest hit in periods of economic dislocation. A survey made by Columbia University in 1934 found 85 per cent of all engineers and 95 per cent of the architects without employment. The technical staffs were the first to suffer when the depression started. In a period when every technical advance is likely to be a blow at the security of the people, and in an economy in which the property relations prevent any effective planning -what is to be done?

The chief objectives must be to throw the burdens arising from dislocation upon those who profit by technical advance rather than upon the workers and professionals. The most immediate means to this is union organization to protect and raise the sandards of all who work for pay.

Some things can be done by government. Introduction of the thirty hour week without reduction in pay will offset to some extent the effects of increased unemployment. A broader social security program should be financed by

taxation of those interests which profit most from technical improvements. Shifting of the tax burden to those best able to pay is fundamental.

Adequate farm relief will help keep the farmer afloat when such inventions as the cotton picker reduce him to starvation. An expanded housing program and other public works will provide work for the unemployed worker and technician.

The experience of Labor's Non-Partisan-League, the American Labor Party in New York, and the Minnesota Farmer-Labor Party indicate that labor activity must be carried into the political field. Technical men must join in the great drive of progressive labor—both to protect their own security and to free scientific development from misdirection or retardation by reactionary vested interests, in order to apply scientific methods, not only to problems of engineering but to economic, political, and social problems as well.

S.D.E FAILS TO JOIN FEDERATION

The referendum vote of the Society of Designing Engineers for affiliation with the FAECT fell short of the required two-thirds majority specified by their Constitution. Despite our disappointment, the fact that a majority of the vote cast favored affiliation with us indicates that great numbers of technical men have become conscious of their need for the progressive assistance of the CIO unions.

An analysis of their vote by chapters also indicates that the winning of technical men to the CIO requires an educational clarification of many misconceptions regarding professional independence. It is significant to note that in those cities where closer ties and understanding existed with the leaders of the UAW locals and of the CIO, the vote of the SDE Chapters favored affiliation. These cities include the veritable stronghold of the victorious auto drive -Detroit, Pontiac, Flint, Cleveland, Lansing. In the cities where the auto drive was comparatively weaker and where the same understanding and ties do not as yet exist, the vote was against affiliation. South Bend, Toledo, Jackson, Mich., and Kenosha were in this category. The latter is a relatively new chapter recently chartered.

The tabulation thus shows the vote by chapters to be 5 to 4 in favor of affiliation. Approximately 55% of the membership voted in the referendum, of which a majority favored affiliation.

CONVENTION SPEAKER



Coleman Woodbury, executive director of the National Association of Housing Officials, and a member of the Chicago Housing Authority, who will address the Federation National Convention,

Saturday afternoon, October 9. His subject will be "Housing."

Woodbury has also been assistant professor of economics at Northwestern University, research associate of the Institute for Economic Rsearch, executive secretary of the Illinois State Housing Board and the temporary Illinois Housing Commission; has acted as a consultant to the Housing Division of PWA, and the National Resources Committee and the Federal Housing Administration.

Woodbury gained favorable mention in the nation's press in 1935 when he stated, "Government assistance to housing should be given only in return for reliable assurances that discredited building and finance practices will be abandoned."

Other speakers at the convention will include Judge Patrick O'Brien of Detroit, candidate for mayor of Detroit on the progressive labor ticket; Homer Martin, president of the United Automobile Workers' Union, who will speak on "Civil Liberties"; Professor Bernhard J. Stern, Columbia University, who will speake at the technological conference, and Adolph Germer, CIO Regional Director for Michigan. Maurice Sugar, prominent Detroit attorney, will also speak at the session with Mayor O'Brien.

A special session of the Women's Auxiliary of the Federation will be held. This marks the first time that this valuable group has taken an active part in a Federation Convention.

Thus, the vote showed clearly, both in general membership and by chapters, that the majority favors unity at this time. Failure of the referendum to achieve unification should not, therefore, be considered a final expression of opinion.

The acceptance of our invitation by the National Chapter of the S. D. E. to participate fraternally in our full Convention gives occasion for the hope that these joint sessions will broaden our cooperative efforts.

HOUSING COMES OF AGE

By Simon Breines

THE Wagner-Steagall Housing Bill as finally become the United States Housing Act of 1937.

This bill is only the first step in the direction of an adequate, public, lowrent housing movement. Nevertheless, because of the powerful reactionary interests which opposed the measure, its final passage by Congress assumes the proportions of a major victory for the progressive forces. The Wagner-Steagall bill would never have broken through this opposition if not for the really comprehensive and persistent support which it received from individuals and organizations, among whom we are glad to number the Federation. There is no doubt now that housing has become a national issue.

Main Provisions of Bill

The main provision of the U.S. Housing Act as adopted by Congress, August 21, 1937 are as follows:

- 1) The creation of a permanent Housing Authority within the Department of the Interior with one Administrator instead of an independent agency with three directors as in the original draft. The President may transfer existing PWA housing projects to the Authority.
- 2) Occupancy of all projects is limited to low income families who are not being adequately housed by private building and whose income is less than five times the rent (including utilities) or six times the rent for families with three or more dependents. It is unfortunate that a maximum rental, or at least a more specific definition of "low rental," was not written into the bill in order to insure the intentions of its sponsors.
- 3) Loans may be made to local public housing agencies for the financing of housing projects constructed by them. These loans are limited to 90 per cent of the cost of the projects and must be repaid with interest in not more than 60 years.
- 4) Bonds guaranteed by the United States may be issued by the Authority to raise funds for these loans in the following amounts:

July 1, 1933, \$100,000,000; July 1, 1938, \$200,000,000, and July 1, 1939, \$200,000,000. This means a reduction of 50 percent from the \$1,000,000,000 asked for in the original bill.

- 5) Annual contributions in additions to the loans may be made by the Authority to local public housing authorities on projects developed by them. During the next three years, contracts providing for such annual contributions may be made up to a total of \$20,000,000 per year, without further authorization from Congress.
- 6) Annual grants (which do not have to be repaid) may be made to the local authorities. These grants are limited to the amounts necessary to achieve low rents, but in no case may they exceed the yield at the Federal going rate of interest plus one percent on the cost of the projects. As an alternative to the annual grants, outright capital grants may be made. Such capital grants are limited to 25 percent of the cost of the project, plus an additional 15 percent which the President may allocate from relief funds for the payment of labor. Capital grants from the funds of the Authority are limited to a total of \$30,000,000 without further authorization from Con-
- 7) Local contributions are required in connection with all projects on which the Authority makes capital grants or annual contributions. In the case of annual contributions, a local government must contribute at least 10 percent of the annual contribution either in land, cash, the capitalized value of community facilities services, or tax remissions or exemptions.
- 8) Slum clearance is required whenever annual contributions or capital grants are made. Provision satisfactory to the Authority must be made for the elimination of slum dwellings equal in number to those in the new projects, but this elimination may be deferred in the case of a low-rent housing shortage so acute as to force dangerous overcrowding.

9) Cost of dwellings (exclusive of land and non-dwelling facilities) is limited to \$1,000 per room and \$4,000 per unit in cities of less than 500,000. The average cost in any project may not exceed the average cost of dwellings currently produced by private enterprises in the same locality, under the building requirements applicable to the proposed site and under labor standards not lower than those of the Housing Act.

In addition to these provisions, a limitation of expenditure is made, so that no State may receive more than ten percent of the funds provided. Family income may not exceed four times the rental, including cost of heat, light, water and fuel. The limit for families with three or more minor dependents is five times the rental.

The Authority is provided with an appropriation of \$26,000,000, available until expended, for operating expenses and the payment of annual grants. Further appropriations must be authorized by Congress. The labor provisions in the bill assure fair wages and standard working conditions. No provision is made for loans to limited dividends housing agencies and there is no authorization for the construction of demonstration projects (such as those of the PWA) by the central Authority.

Does it Meet the Need?

It has been said that the Wagner-Steagall Bill was mutilated in Congress. This is scarcely the fact. With the exception of the reduction in the amount of the bond issues, the bill as passed is substantially the same as the original. It is unfortunate that a limitation on the per-family cost was written into the bill. But the limits of \$4,000 and \$5,000 should prove to be no real obstacle. In New York City today, fairly high standard apartments are being produced at under \$1,000 per room (exclusive of land and non-dwelling facilities).

The real trouble with the bill is not in the changes made by Congress, but in its original inadequacy. The bill as drafted by Senator Wagner would have provided for only 300,000 families and the U. S. Housing Act has reduced this quantity to a maximum of 150,000 families during the next three years. The 21,000 dwelling units which will eventually result from the activities of the Housing Division of the PWA represent a relatively negligible quantity. But the PWA, only last month, esti-

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Editora

THE WAR

"IT is a great temptation in some countries such as our own," stated Secretary of State Cordell Hull on Sept. 19, "to believe that peace may be had merely by maintaining isolation apart from the rest of the world both in time of peace and in time of war. We are determined neither to thrust ourselves into, or be driven into armed conflicts between other nations. This is a basic and sound determination. It should not be relaxed.

"But this policy must be supplemented. We must make our contribution towards the realization of the conditions upon which peace everywhere can be maintained. Still more vital—any nation which completely fails to show interest in, and to give support for, the existence of international order would lose its influence for peace and thus neglect its part in sustaining any civilized basis of relationship between nations".

Those in this country who desire the maintenance of peace, and in this group must be counted the overwhelming majority of the American people, cannot but rejoice at the stand represented in Secretary Hull's speech.

Diplomatic niceties may have prevented him from naming Japan but there can be no doubt who, today, destroys the "civilized basis of relationship between nations".

The greatest hope of the Japanese militarists is that they may meet with no hindrance, moral or material, from other nations. Their conquest can best go forward if it meets with no effective protest. They are especially concerned that China shall receive no means of defense from overseas while Japan, by bottling up the Chinese ports, may continue to add to her already immense accumulations of war supplies. It is vital to their interest that the other signatories of the Kellegg and Nine-Power Treaties shall not take any active steps to compel respect for Japanese obligations. And above all they hope that protests shall come separately; not as the united actions of nations determined to preserve peace.

It is thus very easy to understand the jubilance expressed by the Japanese militarists when the American government, clamped a virtual embargo on war materials for both China and Japan, although actually it becomes an embargo against China alone.

The destruction of life and property by the Japanese should cause any Federation member to ponder on the true uselessness of armed conflict. The technician is a builder, a man who is continually planning the better world of tomorrow. It may easily be seen that warfare is the direct opposite of all he stands for, inasmuch as the war mongers must be definitely classed as the forces of destruction.

The study of engineering, architecture, chemistry, and allied professions, leads us to the planning of a civiliation in which there is a true coordination of the physical necessities, governed wisely by tried philosophies of government in which no arbitrary point of view must predominate.

The aggressor is the antithesis of all this. His acts are truly barbaric. Beginning from the lack of a sane moral viewpoint, he enters the field of the engineer and technician, and in his frenzy destroys in a moment what the engineer and his brother professional have spent years in building.

There can be no doubt that the aggression of the war-makers today is the fruit of the capitulation by the peacemakers of yesterday. Let's not have any tomorrows of war brought about by today's capitulation.

Pious peace declarations remain empty words unless they are transformed into action. The reaffirmation by the U.S. of the Nine-Power Treaty guaranteeing the territorial integrity of China and the Kellogg-Briand Pact outlawing war as an instrument of national policy was heartening to the peace forces of the world. Japan has brazenly violated both of these pacts. The United States together with the other signatories of these pacts should declare openly to the world, their violation by Japan. She and all other aggressors can be stopped.

Collective action through sanctions can do it. Invoking the Kellegg-Briand and Nine-Power treaties can do it. Let's tell our government we want them to do it.



Banks & Munitions: "We need you, my dear!"

THE 3rd NATIONAL CONVENTION

By Lewis Alan Berne Mid-West Regional Organizer



NO period in the history of the Federation of Architects, Engineers and Chemists has been fraught with such portentious events nor witnessed such decisive activities as the period now drawing to a close—the year between the second and third national conventions. It is with a subdued expectancy permeating our national membership that we approach convention week.

Technical professionals who do not live in a vacuum have witnessed the year's developments and are cognizant of the organic relationship between these events and their own destinies. In order to appreciate fully the significance and importance of the convention we must see in a great montage the experiences of the Federation superimposed against the picture of the broader events which make up the history of the nation during that year.

We have experienced an increase in production with a corresponding increase in employment of technical men in private industry. This has been mostly true of the engineering profession, since the upturn has been in a large part due to a program of replacement of heavy machinery, rationalization of production, modernization of obsolete plants, etc. Parallel with this are the tremendous gains and victories of the labor movement, particularly under the ægis of the Committee for Industrial Organiation. There has been a great movement for a return to American principles, such as civil liberties; the right to strike, organize and picket; freedom of speech and assembly, embodied under the slogan, "democracy and progress." These principles have been violated and mutilated in the last decades mainly because a divided, unorganized people in the ranks of labor were in no position to resist effectively, and there had not yet emerged a trade union leadership dedicated to a fight for their preservation. This movement has been simultaneous, both in the labor and political fields.

"Big Business Answers"

We may be proud of this progress

and of the gains thus far made. But we must also take cognizance of the powerful counter-attack by Big Business. The new forms of company unions and other attempts to circumvent the provisions of the Wagner Act, the organization by employers of anti-union "citizens' committees," the attack against the Labor Relations Board as "Communists," all point to a general line laid down by the organizations of employers to stem the march of labor.

It is against this kaleidoscopic background which we must view the experiences and problems confronting the Third National Convention of the Federation. It is with an understanding of the relationships between these varied conditions, and the relationship of ourselves as a union of technical men, as employees and as individuals in this social organism, that we will come out of the convention equipped programatically and ideologically to cope with the ensuing year.

This year has shown dramatically that the economic problems of our people are indisputably fused with the political. The great campaigns of the industrial unions, their victories and growth, have been reflected on the political scene.

In their struggles against the "vested interests"-now become synonymous with anti-labor, open-shop interestslabor was confronted with the powerful weapon in the hands of its adversaries-domination of the political apparatus. The activities of Governor Davey in Ohio, the shocking barbarism of the Chicago police, with the sanction of the Kelly-Nash political machine, served to dramatize this problem. The action of Governor Earle of Pennsylvania in effecting the closure of struck plants, thus avoiding bloodshed; the efforts of Governor Murphy of Michigan in the critical stages of the auto strikes, by their contrasts with other events in Ohio and Michigan, showed the necessity for labor to take an increasing part in the affairs of its communities.

Progress vs. Reaction

Generally, we have experienced a breakdown in the established political alignments, the emergence of two main divisions of opinion—the progressive vs. the reactionary. The common fight of the reactionaries in both major parties against the Supreme Court reform, the Wages and Hours Bill, are outstanding indications of this process. It is significant that the major political issues of the day are so obviously economic ones also. The Supreme Court reform was aimed against the defeat of legislation affecting the economic conditions of the American people, such as the Wagner Act, the Wages and Hours Bill, the Wagner-Steagall Housing Bill, etc. In each of these, the future of the unions and labor in general were directly concerned. The overwhelming support by labor for these measures is natural, as is its corrolary, greater political activity of labor.

This raises a special problem for our convention. We are affiliated with a national labor movement which, in the course of its activities, has been been confronted with the necessity for political action. There is a body of opinion which holds that "unions should concern themselves only with economic problems." Cold reality makes this theory fall of its own weight. We have seen that it is no longer possible to say when as issue stops being economic and becomes political. Our enemies are gathering their forces to destroy our organizations economically and politically. It is therefore essential that the convention establish a policy and make provisions which will allow the Federation to take its proper place alongside all other unions in the political, as well as social and economic fields.

We have found a change in the character of our membership during the past year from WPA employes, in the main, to private industry. Recognition of this trend resulted in the appointment of full-time organizers in key cities, such as Chicago, Detroit, New York, Philadelphia, etc. We have established a base, as yet inadequate, in private in-

dustry, and our problems have become greater. For the first time we can point to real struggles of technical men in industry for better salaries and working conditions, for recognition of their union. We can point to agreements, written and verbal; to recognition of the Federation; to protection gained as closed shops. There are the important lessons of the Universay Oil Products strike yet to be learned. We can say that the activities of the Federation in New York, Chicago and elsewhere have been decisive factors in improving the conditions of technical men generally:

CIO Affiliation

Affiliation with the Committee for Industrial Organization has been the greatest event of the year. Through it, we established organic contact and unity between the professionals and production workers, to their mutual benefit. Through it, we have been able to launch a national drive never attempted before for technical men. The barrier created by employers between us and the production workers is being broken down.

However, these experiences contain within themselves some problems for the convention. The question of our relationship to the industrial unions must be clarified. In many cases these unions looked upon our efforts to organize with suspicion. There are many reasons for this. For years they have been subjected to the same propaganda used on the technical men: that the latter are identified with management. Then there is their determination that never again will labor be divided by craft lines in mass production industries. We will overcome these minor obstacles through our success and our demonstrated loyalty to industrial unionism. It will be seen that, as yet, technical men can most readily be organized by the Federation in most plants and industries. The CIO recognizes the special problems of organizing technical men, and our charter testifies to that. In many places we have already broken down the doubt and hesitancy. In those places our brightest hopes lie. They will also serve to show the way elsewhere.

White Collar Unions

We will have to work out forms and methods which will permit our locals to work with the industrial unions, become identified with them, in fact, and present a solid front to the employers. We must be watchful of the attempts to utilize what may appear to be a division in the ranks. Plant councils, joint

grievance committees, even joint membership meetings, are some of the methods applicable. By our interest and participation in the affairs and problems of the industrial unions we will break down any fears that our union in a plant is the beginning of craft divisions again. We must also be prepared, in this connection, to act jointly with unions of other white-collar workers, to carry out joint drives in various plants.

In countless places technical men are the majority of employes. At the same time there are other white-collar and production workers in the same plant or office. In such places the division into crafts would only serve to weaken the position of all. In the Federation, specifically in the Chicago chapter, we have found it not only advisable but essential to organize all the employes into an industrial local of the chapter. The added strength of the other workers was essential to the success of the technical men. Provision for industrial locals will become more necessary in the future. As a CIO affiliate we are committed to the principle of industrial unionism. In those places where we are in a position to organize along these lines, and especially where there are no other unions equipped to do the job, we must not hesitate to do so.

The convention is also faced with the fact that, generally speaking, technical men are organized in great numbers. This organization takes the form of professional or Founders Societies, which have for years functioned as the antennæ through which technical men have received the propaganda and tradition tending to identify them with management. Through this medium we have been taught that we are individualists, with professional dignity to maintain, rather than living standards. It is through these societies that employers are directing their attack against unions for technical men. The publications of these societies breathe a constant and vitriolic attack against unionism, lately intensified.

We have the problem here of reaching the membership of these societies, which is for the most part in the employe class. We must overcome the prejudices generated by the societies. Popularization of our aims, our program, our methods and activities, will go far in this respect. Our activities and victories in the places where the members are employed will demonstrate the fallacy of the argument that unionism means loss of professional status. It will demonstrate the reverse: that unionism means higher professional standing. And

we must explore to the fullest the possibilities of enlisting these societies in campaigns of such a nature as will allow them, despite employer domination; nay, compel them, to act in the interests of their membership, lest it be alienated.

Education Needed

Our educational work nationally is still weak. Technical men should be acquainted with the history of the labor movement, with its problems and how they fit in. History will show how the white-collar workers have been used against their brothers, and to their own disaster. Our membership must also be equipped with the answers to the attacks against us. There is the problem of training our own leadership, of establishing a national policy of education in organizational principles. Manuals, publications of general and specific nature and interest, must be the task of a national educational department attached to the national office. And, finally, we must provide the facilities where our membership may satisfy its desire for technical development and education. Let us remember how effectively the educational institutions have been used in reaching technical men with anti-labor principles. The New York Chapter School is an indication of the tremendous possibilities along this

The record of the Federation for unity of technical men is beyond reproach. We are constantly coming in contact with independent groups and organizations of technical men. The task of unifying these groups into one powerful national union of the CIO is of primary importance. Such unification would not only strengthen the position of technical men and improve their conditions, but would serve to attract the hundreds of thousands of unorganized.

We must therefore re-examine our approach to this problem and work out a policy and minimum program which would be embraced by these various groups. It may be necessary to provide a structure and form of affiliation which would permit these groups to affiliate without necessarily losing their identity completely. It is in the interests of big business to maintain divisions in the ranks of labor. They are utilizing the splitting tactics of the A. F. of L. leadership with the hopes of effecting and perpetuating this division. Our task in the technical field is to unify all groups.

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LINOTYPE LAWYERS FIGHT FEDERATION

OPPOSITION to the organizing activities of the Federation at the Mergenthaler Linotype Company at Brooklyn has reached the stage where the company is using high-priced legal talent to assist in its efforts to foul the progress of the Federation bloc.

While the lawyers are asking and receiving delays from the NLRB on the question of an election to decide which group will represent the employes in collective bargaining, a hastily fostered company union is striving feverishly to marshal membership. In this it is being assisted by the management, which is granting the usual small salary increases and looms in the background as the only logical client of a firm of lawyers representing the company union, but which claims its fees are being paid by the employes.

Prior to the activities of the Federation there was no union or association of any kind for the technical men.

The Federation met with the management's representative, C. A. Hanson, vice-president of the company, in August. At that meeting, Hanson was extremely affable and appeared ready to do business with the Federation, but stated that as a matter of form, and to comply properly with the terms of the Wagner Act, he wished the Federation to produce credentials as the officially elected bargaining agent of the professional employes.

Independent Union

The Federation therefore asked for a hearing with he NLRB for the necessary certificate. But like a bolt from the blue, when the hearing convened, one of the most highly-paid firms of international lawyers appeared, requesting that room be made on the ballot for "an independent union."

The lawyers, Breed, Abbott and Morgan, of 15 Broad street, New York, declared they were retained by this "union," whose members were paying their fees from their own pockets!

And, as a further surprise, these lawyers were apparently representing a union whose existence was not a matter of record. For, while it is true that some

men in the company had attempted to form a company union, they had only held a brief meeting at which no constitution was set up, no dues collected and no title assumed.

(EDITOR'S NOTE: It might be well to remark that this legal firm numbers among its members Charles H. Tuttle, Republican nominee for Governor of New York a few years ago. Ogden Mills is a prominent stockholder in Mergenthaler. He was also Secretary of the Treasury at Washington under President Hoover. The attitude of these two men toward the present administration at Washington requires no comment. The company itself is represented by the outstanding legal union buster, Walter Gordon Merritt.)

Shortly after the Federation met with Hanson in August, a petition written on company stationery appeared during office hours and was freely circulated around urging the technical men to repudiate the Federation.

Fair Play Asked

The Federation immediately wired Hanson asking that he show fair play and stop this campaigning during office hours. Hanson's answer to the Federation stated, among other things, "We do insist that there must not be any soliciting of membership in any organization on the company's premises or during working hours."

This answer reached the Federation four days after John Caliguri, spokesman for the company union, had called a meeting at which approximately forty engineers were present. At this meeting Caliguri assumed the chair and, ignoring the questions from the floor regarding the proposed activities of the group to obtain better living conditions at Mergenthaler, baldly stated that the prime purpose of his group was to "beat the CIO."

Apart from this very definite statement as to policy, the group appointed no officers, no chairman, assumed no name or title and levied no assessment of dues or initiation. Yet the law firm of Breed, Abbott and Morgan states it is this disorganized group led by Caliguri that is paying them their fees.

An interesting sidelight on this meeting was evidenced when the chance to speak from the floor was denied to an officer of the United Electrical and Radio Workers Union, despite the urging of those present that Caliguri let him speak.

Note: This union had just been successful in the shop at Mergenthaler's and duly appointed by the NLRB as the bargaining agent over the opposition of a rival group which was beaten in the election two-to-one.

However, following the appearance of the lawyers at the first NLRB hearing, the company union faction quickly called another meeting, at which Clarence McCullough was appointed president; Zoltan Zadory, treasurer, and Robert Ellinger, secretary. The name, Employe's Association of the Engineer-Department of Mergenthalers, was adopted, and \$1 initiation fees and fifty cents monthly dues assessed.

Assuming forty-five men were present and each contributed his required dues, it still remains interesting to observe that such a high-priced legal firm will appear in court to defend this group for such a small fee. Philanthropy, it is said, assumes strange guises.

These delays are being engineered in an attempt to hinder the Federation's plans for complete unity. Indications reveal however that the company attitude is not proving successful, and at the final hearing, it is conceeded by the men at Mergenthaler, the Federation will unquestionably be chosen as their bargaining agent.

(Editor's Note: Conservative journalism is raising the cry against unions and labor in general to keep its word, play the game, etc. In this Mergenthaler case the interests of fair play for the men are clearly not the concern of the management. It is easy for any unbiased observer to understand how satisfactory the cry "Beat the CIO" must prove to such men as Tuttle, of the firm, Breed, Abbott and Morgan, and to Ogden Mills stockholder of the company. Appearance of such lawyers in the case for the company is prima facie evidence of the firm's idea of what constitutes fair play.)

The Federation is now going ahead, aided by its own lawyers, to offset the company union and to satisfy the NLRB that the Federation is the bona fide agent of the engineering employees.

The latter are confident that the Federation is the Union that will accomplish most gains for them, and protect these gains when won.

FEDERATION ACTIVITIES

By Marcel Scherer
Federation Organizational Director



Editor's Note. The New York Evening Post furnishes the following description of Marcel Scherer, Federation national organizer.

"Marcel Scherer, a round faced, black-eyed, pleasant-voiced young man is the organizer for the Federation of Architects, Engineers, Chemists and Technicians.

"His earliest memory is marching in an AF of L parade when he was barely six. He walked beside his father, a veteran union man.

"It didn't surprise his family when their son turned pacifist in high school. That was when the world had gone crazy with war fever and most high school boys with it.

"Mr. Scherer was dismissed from high school for preaching what is good form now—that war is a pretty ugly business.

He was prominent in the formation of the Federation and has watched over its growth since its inception. Today in the National Office, 22 East 17 St., New York City, he interviews and directs countless organizers and workers from all parts of the nation.

He is in close contact with all trade union movements and is frequently called upon by these groups for advice and guidance.

Scherer feels confident of the future for the Federation as well as for all trade unions.

International Unions

Vice-president Lew A. Berne took a special trip to Pittsburgh and met Phillip Murry, chairman of the S.W. O.C. and found him in accord with the Federation's proposal to organize the technical men into the Federation with active support of industrial unions. Amalgamated Association of Iron, Steel and Tin Workers.

Frank Bennett, international president writes; "We are very glad to know that the CIO has covered with a charter the Architects, Engineers, Chemists and Technicians in mass poduction industries, and realize that owing to there being only a small number employed in each industry when compared to the full number of employes in each plant, that they no doubt

will be in need of assistance, at least at times, from other organized forces of their plants. This being true, this office readily offers cooperation in and along any line of help of which it may be thought we could lend any assistance."

The International Union of Mine, Mill and Smelter Workers and the International Union of Aluminum Workers, have written John L. Lewis that they will cooperate with us.

Los Angeles

Visscher Boyd writes, "Saw Bridges. Quite a guy, very un-big shot in his manner, quiet, sound. He is notifying all unions of our existence and favors our organizing marine."

The Chapter has picked structural steel for concentration, including the following plants: Columbia Steel, Bethlehem Steel, Emsco Derrick, American Can and Continental Can.

Organizers for the S.W.O.C. are furnishing contacts in steel and ship-yards, Moore Ship and Bethlehem Ship, since a few technical employes have already signed with S.W.O.C.

To quote Boyd, "I believe we can establish the following perspective. A functioning steel local by the time of the Convention, 100 members in steel by November 1, contracts by the end of the year and a chapter membership by that time of 500. This is modest and will be carried out without difficulty."

San Francisco Bay

A new Chapter has been organized in this area, following a meeting of a group from Berkely with Boyd. Charter application has been received and approved by the National Office. The Chapter will be number 25. Members are all in industrial plants and a group of chemists from Shell Oil. The CIO regional directors local council and organizers are helping the group and will attend meetings.

Chicago

Concentration is being carried on in steel and farm equipment industries. The S.W.O.C. held a conference of 10 plants in the midwest of the International Harvester Co., and Frank Kornacker addressed this meeting. Re-

sponse was good and contacts were turned over to us in all these plants. The plants are located in Chicago, Moline, Milwaukee etc.

Concentration on the chemists is also going on in the Carnegie-Illinois plant in Gary, Ind. Chemists in metallurgical laboratory get 68½ cents an hour to start plus two cents increase at six month intervals for a period of two years and that's tops.

Cincinnati, O.

After a year of paralysis within the IFTEADU, Cincinnati is now going places with us. A local of Globe-Wernecke (office furniture) draftsmen has been set up with the help of the CIO. This local is negotiating for increases and union recognition. Quite a start for a two-months old Chapter.

New Jersey

The local at International Nickel has started negotiations and the following are their demands: 1. Salary increases; 2. Five-day 35-hour week; 3. Two weeks vacation; 4. Education. Company to pay tuition for employes attending evening classes; 5. Union grievance committee.

Washington, D. C.

The following recommendations have been made for a legislative program: Court of Appeals, Bill for promotions; Minimum wage, raise to \$1800 from present \$1020; 35 hour week; voluntary retirement after 30 years service; mandatory promotions.

The Navy Yard local reports membership gains. A grievance committee was set up with the Commandant, and took up matters of unsatisfactory method of efficiency ratings. There is also progress in procurement. After having a small number of members in good standing, personal follow-ups resulted in excellent returns.

Massachusetts

G. E. in Lynn has been organized into the UE and RW with some 200 out of 300 members. We have arranged for cooperation to carry through a national drive in all G. E. plants.

First members signed up with good prospects to organize a chapter in this city. Our concentration is on large machine plants in New England area, Sturtevant, Allis Chalmers etc.

Philadelphia

General Electric. A local has been set up. Excellent cooperation has been given by the UE and RW local and a joint plant Bulletin is being issued regularly.

Westinghouse. A local is to be formed by October 10. Work continues at Brills, Baldwin and in hospitals.

THE CO

Looking Ahead

By Len De Caux

M ILD and domesticated husbands, after generations of thought, have failed to think up a satisfactory Yes-or-No answer to the old trick question,



"Have you stopped beating your wife?" Yet the CIO. is expected to produce such an answer to thousands of questions couched in similar terms, after little more than a year of existence.

It may be unsporting and against

all the rules of parlor games for a henpecked husband to answer, "I never did beat her." But let's see the answers the CIO might give if it jumped the traces on such questioners and assumed they were interested in the facts.

"Why, don't you dump your Communist leaders?" is a favorite poser. This is a demand which the CIO, with the best will in the world, would find it impossible to meet, since it has never had a Communist leadership to dump.

Furthermore, men like Lewis, Hillman, Howard, Dubinsky and the rest of the CIO leaders obstinately refuse to become Communists for the purpose of being dumped and so satisfying their questioners.

"Why seek to overthrow American democracy?" is another honey, to which the CIO can only murmur in reply, "Why, indeed?" The CIO happens to have been formed for the express purpose of safeguarding and extending American democracy.

Working people have more good reasons than anyone else to fight for such democratic rights as they possess and to demand more of them. Unions are among the most democratic forms of organization yet devised. By bringing millions of unorganized into unions, the CIO is not only extending democracy into industry but is building the strongest possible bulwark for the defense of American democracy generally.

False Trails for Sale

"If you aren't reds, why don't you red-bait?" is one to which the CIO might answer, "Because we weren't born yesterday." The redherring tactic is so ancient and obvious that it is insulting

to expect such an experienced leadership as that of the CIO to fall for it.

Every forward step in the history of social progress has been greeted with charges similar to those now hurled against the CIO. Every trade union leader who has lifted a finger for the betterment of labor, every active unionist, has at one time or another been dubbed an agitator, Bolshevik or whatever else happened to be the favorite epithet of the time.

Even the most swivelchair-bound paragon of AFofL inertia can look back to moments of activity when he too earned such accusations.

The tactic of the red-herring is designed to divert attention from the real issue. When reaction dangles this ancient and smelly fish across the trail of progress, it has no interest in the fish as such. It only hopes the forces of progress will follow a false trail to their own undoing.

NEWSPAPER GUILD AFFILIATES CIO

By an overwhelming majority the membership of the American Newspaper Guild ratified CIO affiliation and expansion of its membership base. Seven of the eight remaining St. Louis Convention decisions under review in the referendum were upheld by substantial majorities. The resolution condemning fascism in Spain was rescinded by a narrow majority.

Upon completion of the official tally at International headquarters, President Heywood Broun said, "The membership has shown its overwhelming belief that the CIO is the real labor movement of the country. It has also given its approval to the general policies of the AN,G including real industrial unionism to the fullest practicable extent, progressive trade union democracy, and the right of the union to take a stand on public issues. Since the membership of the Guild is the supreme authority, I have every reason to believe and hope that there will be complete unity among all our members in carrying out those decisions which have been made in the referendum".

CIO Invites Federation

Robert M. Sentman, national president, and the executive officers of the Federation have been invited to the CIO national conference, called by John L. Lewis. The conference will be held in Atlantic City, October 11.

LOCAL TWO VOTES TO JOIN FEDERATION

The recent national convention of the AF of L union of technical men held at Washington, D. C., September 13-16, proved a bitter disappointment to the many progressive in that union. The problems facing the technical men throughout the country received little consideration, but much time was spent defeating the issues supported by the progressives.

Nearly one-half of the membership was lined-up solidly as a progressive bloc against President C. L. Rosemund's administration. This bloc included the three largest locals, St. Paul, Milwaukee, Pittsburgh and some others. These groups represented about 50 per cent of the delegates until the administration trotted out 13 proxy votes whereupon the voting strength became 27 to 16.

The progressives raised the following issues: The necessity of a strong organizational drive; increase of the executive board from four to seven members; a national publication; approval of the industrial organization where necessary; democratic representation to the convention. These issues on the whole were either dodged or defeated. Half-hearted support was given to the question of industrial set-up in order to satisfy St. Paul, an industrial union with 250 clerks.

The Seattle local, a large one, sent in a number of progressive resolutions, but since they were represented by proxy, this latter power was used in voting against their own resolutions by Rosemund.

Rosemund's control of the convention is due to the unfair representation of locals.

Developments at the convention saw Rosemund's executive council re-elected with the addition of Filboy of Chicago. Local Two, for many years a progressive group noted for its anti-Rosemund policies, was finally wiped out of existence. Rosemund revoked the local's charter last May but was forced to restore it due to the protests of many other locals, and also in response to an injunction restraining his act obtained by Local Two.

Following the convention, a membership meeting of Local Two adopted a resolution to affiliate with the Federation. A referendum approved this action by an overwhelming majority.

UNEMPLOYMENT IN ENGINEERING



SECOND release of the results of a nationwide survey of the engineering profession undertaken in May 1935 by the United States Bureau of Labor Statistics has been published in a recent issue of the Monthly Labor Review.. The devastating effects of the depression on the engineer are more far-reaching than on any other class of professional men. The slump in the building trades and heavy industry throughout the country was more than reflected in engineering unemployment. Unemployment statistics can never portray the results of actual loss of income of those unemployed, nor the sad story of retrenchment in the lives of those who received sharp pay cuts while still employed in private industry.

In an attempt to get from these statistics a coherent picture of the engineer's status in the employment field today, one begins with the realization that all this information is already antedated, since these findings have been based on data assembled from questionnaires covering a five-year period from December 1929 to December 1934. These questionnaires were circulated throughout the engineering profession early in 1935, and filled-in reports were received from 52,589 engineers, to serve as the groundwork for the Bureau of Labor Statistics' survey and analysis.

Of the 73,151 questionnaires sent to engineers whose names had been taken from lists of engineering societies, license boards and deans of engineering schools, less than thirty per cent of the questionnaires were filled in and returned. This avoidance of the questionnaires may be due in a large degree to the material repugnance of the professional man to set down on paper the fact that he was unempoyed or on

By William H. Quirk

relief. This being true, the percentage of unemployed among engineers would be considerably greater than the figure produced by the questionnaires, which showed that more than thirty-five per cent of all engineers were unemployed at one time or another between 1929 and 1934.

1934 Slight Improvement

At the end of 1932, one-tenth of all engineers were unemployed and at the end of 1934 a slight improvement was noted, unemployment having dropped to embrace about nine per cent of the profession. During the five-year period, 1929 to 1934, covered by the survey, more than one-third of the engineers had some period of unemployment and, of these, half were out of unemployment for more than a year. This experience with unemployment was common to all professional classes of engineers and was not restricted to any particular branch. At no time was direct relief extensive among engineers, but the development of work relief programs after 1932 became an important factor in helping to give employment to the everincreasing number of engineers who were losing their positions in private industry and also were being dropped from civil engineering departments.

With respect to age groups and unemployment, those hardest hit were the engineers, who were entering the profession after 1929, and those whose age was passing the fifty-year mark. About half of the younger group were unemployed at one time or another from 1930 to 1934. When the older engineers became unemployed, however, unemployment lasted longer than it did with the younger engineers. The average period of unemployment for the younger engineers during the five-year period was twelve months, while the older engineers were idle for nearly two or five years. Moreover in a period of expansion the younger and more inexperienced engineers have a definite advantage, as the normal method of recruiting at the bottom is still followed, with large numbers of young men available for hire at low salaries. The "experience" of the older engineer does not offset the pecuniary advantages to be gained from the employing of younger men. This discrimination against experienced men in the engineering profession, whose sole drawback is their age, is a growing condition now reaching serious proportions

Age Factor a Menace

The age factor was developed into a menace only fairly recently in the profession. Prior to 1929 the man with experience was demanded, and the wisdom that he had acquired only through years of service was reflected in his salary check. Today, however, if we are to judge from the labor statistics, too much experience disqualifies a man even more than too little experience. It may be from a sense of shame on the part of the employer that he does not offer to an older, experienced engineer the salary that he extends with a takeit-or-leave-it attitude to the young engineer who is breaking into the profession. This practice of age discrimination is already spreading from private industry into civil service and can be detected by observing the shortening on the age limit in the requirement for positions.

Looking at the education angle with regard to unemployment, the engineer with the more advanced education is comparatively better off than the one who is not so well equipped. Thus at the end of 1934 the engineering groups with postgraduate degrees were 6.3% unemployed, while those with first degrees were 9.1% unemployed, while those whose college courses were incomplete and those who had taken noncollegiate technical courses averaged around 10% unemployed.

New Survey Needed

There is a definite need for an upto-date survey covering the years 1935 and 1936, to discover how the engineer is now faring with regard to employment. A worthwhile study should be conducted again at this time by the Bureau of Labor Statistics or by the Division of Social Research of the Works Progress Admiinstration.

A more extensive field should be reached than in the last survey; those 52,859 responses constitute but a small percentage of the engineers in the United States. Provision should be made in the questionnaires to ascertain as far as possible what is the background of his employment, if he employed.

Statistics should be developed showin just how responsible the Federal government is, in the employment of engineers; directly, in their own civil service, army and navy departments,

Continued on next page

Continued from preceding page. etc.; through agencies, such as WPA on works relief programs, and PWA in public works construction, and also indirectly through the large number of contracts awarded to private industry which absorbs engineering talent.

An interesting contrast could be drawn showing the percentage of engineers employed in private industry in no way responsible to Federal funds for their employment.

Although the questionnaires covered earned income of the engineer, no compilation of these statistics has been assembled. These figures, if released by the Bureau of Labor Statistics should prove interesting. Here, after all, is a matter of vital importance to the engineer, for outside of obtaining desirable employment, uppermost in his mind is the salary question, so-called ethics of the profession notwithstanding.

A comparison of salaries over the five-year period of 1929 to 1934 would no doubt show trends of definite importance in the unemployment situation. In any future questionnaire, a relationship could be established between whatever increase there is in the earned income of the technical man after 1933 and the advent of the CWA, FERA and other governmental pumppriming agencies. A future survey could trace whatever progress has been made in salary increases and its relation to WPA.

Comparison of salary increases on WPA projects throughout the country with reference to geographical location and type or nature of project is an item to be considered.

WPA a Yardstick

It is apparent that private industry is using WPA salaries as a yardstick for their own wage scale. The inevitable question put by an employer who is hiring a man from the WPA rolls is what was his salary while on the WPA. The employer may meet this figure; like as not he will cut it, but seldom will he advance it. It naturally follows that fluctuations in WPA policy are felt in private industry. When the employment market is glutted by periodic purges of relief rolls, wages in private industry subsequently show a slump, since the supply of technical men exceeds the demands for their serv-

With a prevailing wage in effect on WPA and a sensible program of providing employment for those whom private industry cannot absorb, it may reasonably be assumed that private in-

dustry will be forced to maintain decent standards.

Regarding civil engineers, the percentage of those employed by governmental agencies is no less than sixty-three per cent. This unusually large relative number in government work is explained primarily by the almost complete cessation during the period immediately preceding the survey of civil engineering opportunities in the normal fields of activity other than government.

Government Projects Needed

Referring again to the figure of nine per cent of all engineers unemployed at the end of 1934, and with no indications by comparison with general unemployed statistics that this percentage has decreased, there remains still a crying need for development of work programs that call especially for engineering training. Engineering organizations can further the material interests of their members by advancing worthwhile projects for governmental approval. These projects should be selected with an eye to economy, usefulness and definite need. There is an abundance of such worthwhile projects that can be developed into a lasting benefit to the nation and which do not conflict with private enterprise.

They will thus keep the engineer employed in the field for which he is best fitted by training and experience and through which he can render a service to society within his profession.

Continued from page eight.

mated that there is an immediate need for 1,600,000 dwellings in the U. S., and it is obvious that most of this need is in the low income groups. Private builders cannot be expected to supply this need. The brief spurt in residential construction in the past year has again demonstrated that private builders can provide for only the middle and upper sections of the population where the need for new accomodations is not so great. Indeed, at the present time, even the recent boom in residential construction is tapering off.

The technicians in the building field who anticipated more jobs and the millions of slum dwellers who expected to be rehoused by the bill will be largely disillusioned. Despite the positive virtues and the valuable precedents established by the U. S. Housing Act, it can do no more than scratch the surface of the whole problem.

A startling corroboration of this fact is furnished us by the financial

interests themselves. In a recent issue, Business Week refers to the housing bill as a "mild measure" and points out that it will not produce a building boom, clear the nation's slums or meet the existing demand for low-rental housing.

"At best it is an experiment," says this magazine of big business. "Private real estate will not be damaged, particularly. The program is not extensive enough to do harm. If everything clicks along perfectly, only 150,000 or so families will be accommodated in three years. Which, in a broad housing program, is as nothing.

Business Week is not only frank, it seems positively elated. Well, that is where the Federation and all other proponents of an adequate housing program come in. The present bill is a beginning, but if we seek an alleviation of the accelerating housing crisis and a widespread renewal of work opportunities in the building field, we must press for an enlargement of the official program. We must be prepared to demand additional appropriations from the next Congress and our Chapters must support local campaigns for additional housing projects in states and municipalities. When Business Week loses its smile, we shall know that we are getting somewhere.

JEROME DAVIS, CIO ADVOCATE HEADS TEACHERS' FEDERATION

Professor Jerome Davis of New Haven, Conn., C.I.O. advocate, was re-elected president of the American Federation of Teachers at the annual convention meeting here, defeating Charles B. Stillman of Chicago, pro-A. F. of L. leader.

The convention voted 285 to 227 in favor of a referendum of the question of joining the CIO.

That the sentiment of the delegates was strongly in favor of the Committee for Industrial Organization was indicated in the report of the affiliations committee. The majority report which proposed that a referendum on the question of joining the CIO be held after February 1, 1938, attacked the AF of L for suspending CIO unions and asked the convention to refuse to pay the per capita tax proposed at the AF of L Cincinnati conference.

The committee split 13 to 8 on the report, the minority AF of L group asking that action on joining the CIO be deferred until after the next convention at the earliest, and urging the AF of L executive council to unify all "genuine labor organizations."

OF REVIEWS

THE GUGGENHEIMS By Harvey O'Connor

New York: Covici-Friede, \$3.00, 484 pp.

THE Kennecott Copper Corporation anounced a net profit of \$25,490,764 and a surplus of \$78,311,320 at the end of 1936. The American Smelting and Refining Company had a net income of \$17,131,320 and a surplus of \$20,799,041 for the same year. Simon Guggenheim is the chairman of American Smelting and the Guggenheim family is the largest stockholder in both companies.

The story of how this great family fortune was built up, of how Daniel Guggenheim, died 1930, became one of the 59 Rulers of America (he was so acclaimed by James W. Gerard), is one long account of murder and oppression. Murder not only through the killing of strikers, but also through the notoriously bad conditions in the Guggenheim smelters. As late as 1913 one man in every four suffered a disabling accident, and death from arsenate of lead poisoning was common.

In 1900, 1902 and 1903, the Western Federation of Miners led the miners and smeltermen of Colorado in strikes against the 12 hour day. They found themselves "looking down the barrels of loaded army rifles." At Perth Amboy, N. J., in 1912 four strikers were killed and in Utah and Nevada thugs from a strikebreaking agency killed two more.

During the war, in 1916, the Guggenheim companies realized \$7,000,000 more in profits than did their 22,000 employees in wages. And in 1917 the Alaskan miners of the Kennecott Corporation, striking for a fifty cents a day increase, were evicted from their bunkhouses and required to sign "yellowdog" contracts.

Thus, all through its history the Guggenheim fortune was built on the strength of Winchester rifles, martial law, evictions. The story is ably told by Harvey O'Connor in *The Guggenheims*.

MATHEMATICS FOR THE MILLION

By Lancelot Hogblen

New York: W. W. Norton and Co. \$3.75, 647 pp.

THROWING theory to the wind and relying chiefly on practice,

Hogblen has written a book which gives to those who were frightened away from mathematics in their schooldays a chance to learn why they might have studied it; and to technicians in general an insight into mathematics that goes beyond trigonometric functions and second derivatives.

In the presentation of geometry, for instance, parallel lines are not defined as in a text following Euclid. Their existence is accepted as a matter of experience. Hogblen then goes on to show by physical considerations how we may recognize parallel lines. In calculus the derivative becomes the ratio of two immeasurable small quantities and dx^2 is dropped as negligible in comparison.

Hogblen presents those parts of mathematics necessary to an understanding of the world we live in, plane geometry, algebra, trigonometry, probability, each in its historical development and setting. He makes much use of graphic and visual methods, dragging mathematics out of the abstract through references to the physical sciences.

To the engineer, architect or chemist, to whom algebra and geometry, sines and cosines, are the simple tools of every-day occupations, the question "Why mathematics?" may not be pointed. Among non-technicians, however, the greater number struggled through plane geometry and algebra without knowing why, with no idea of the practical applications of the subject.

Here is a book interesting to all, giving perspective to the expert and a clear answer to the question "Why?"

DEAD END Released Through United Artists

THE housing question is a burning one for architects and engineers. And "Dead End" is the best picture on the housing question to come out of Hollywood.

Set in a dead end street running into the East River, slum dwellings on one side and a Sutton Place apartment building on the other, the picture tells vividly how slums breed gangsters, killers, thieves and prostitutes. The heroine comes home from the picket line to cook for her young brother and worry about bringing him up under the influence of the slums; the famed "Baby Face" Martin comes home to see his mother and incidently to plot a kidnapping; the kids swim in the filthy open sewer that is the river.

In contrast to this we see the son of a millionaire, boasting of his private swimming pool; the mistress of a Wall Street broker, in love with the hero but afraid to face a future of poverty with him.

And the hero in a young architect who has never worked at his profession, who dreams of projects to replace the slums.

The picture offers no solution to the slum problem. It is satisfied with picturesque kids fighting after a swim, with gangsters dying in a blaze of gunfire, with the familiar love triangle. But we know the solution. The solution lies in an adequate Federal housing program.—S. G.



N.T.A. FACES RACIAL PROBLEMS

By Milton Fischer

THE Negro technician faces a twofold problem: Not only is he affected by the general adverse economic set-up that faces the technical man, but he must also deal with the problem of racial discrimination that plagues his every effort.

To justify this discrimination the propaganda agencies of reactionary elements have for many years laid down a barrage of lies, seeking to inculcate in the public mind the dangerous doctrine of Negro inferiority, which in practice expresses itself in "Jim Crowism," segregation, wage differentials and, in its lowest form, the actual lynching of Negroes.

The National Technical Association is living proof to refute all the bias contained in reactionary teachings concerning the Negro race. The fact that the Association numbers among its three hundred Negro members men of high professional standing who have made their mark in the private, industrial, commercial and educational fields, as well as in the city, state and federal governments, indicates that the Negro technician, under more favorable circumstances, could forever dispel the myth of white superiority.

Among the NTA membership are Negro architects who are building educational plants, churches and community projects; Negro engineers who are constructing bridges, tunnels and highways; others are metallurgists, chemists, chemical engineers or physicists. A number are educating Negro youth for the technical professions. Three members are winners of the "Harmon Award" in the field of science.

EDITOR'S NOTE: George Washington Carver, outstanding Negro chemist, is the finest answer to Negro discrimination to hand. Born of slave parents and once traded for a horse, this remarkable genius has obtained from the peanut more than three hundred useful products and from the sweet potato more than a hundred. He has turned down salaries for himself amounting to six figures. He is also a painter, with canvasses hanging in the famous Luxemburg Galleries. He is director of the Department of Agricultural Research

in the department of Plant Industry, member of the Royal Society of Arts in London and holder of the 1923 Spingarn medal.

The Ninth Convention of the N.T.A., held in Washington, D. C., September third, fourth and fifth, had representation of these men from the six chapters of the organization in New York, Washington, D. C., Chicago, St. Louis, Detroit and Tuskegee.

The Federation of Architects, Engineers, Chemists and Technicians, at the invitation of Dean Downing of the Howard University School of Engineering and Architecture, sent fraternal delegates.

Milton Fischer, Washington, D. C., organizer, was designated as fraternal delegate by the National Resident Committee. Marcel Scherer, Federation organizational director, was also present at the convention and presented a paper entitled "The Technical Man and His Relation to Technological Progress."

Fischer conveyed the greetings of the Federation to the assembly and expressed the pleasure that the membership of the Federation felt in being allowed this opportunity to further cement the cordiality and co-operation that exists between the two organizations.

The keynote of the convention was sounded by President Cornelius Henderson, of Detroit, who, in the call to the convention, stressed the objectives of the Negro technician, not only to achieve the highest in technical attainment, but also to "forcefully demand equal recognition with other men in the industrial marts of the country."

The scientific papers read dealt with subjects in the fields of electrical, mechanical and metallurgical engineering. An outstanding paper on "Recent Developments in Engineering Alloys" was presented by James A. Parsons of Dayton, Ohio.

The lack of jobs for Negroes and discrimination against them was touched upon by almost every speaker. It was noted that this policy of discrimination was also evident in the government service. Dr. Robert C. Weaver, advisor on Negro affairs, United States De-

partment of the Interior, pointed out that it is very difficult to get Negroes into the Federal civil service, but it is well-nigh impossible to get any Negro into a department, once a Negro, for any of many reasons, should have fallen down on his job.

Other speakers suggested possible means of finding openings for Negro technicians, but in the main it was evident that no workable solution has yet been found. The fact remains that high professional attainment will not alone solve this problem.

The Federation has long been aware of the special problems facing the Negro technician. It has had occasion to deal concretely with cases of discrimination against Negroes and the lack of job opportunities. In the report of the N.T.A. Chapter, it was pointed out that, with their assistance, the Federation had succeeded in obtaining openings for Negroes. This would seem to indicate that what holds true in the case of the Negro worker is also true of the Negro technician.

Only effective mass organization will solve this problem. The movement of the CIO has great significance for the Negro people. In steel, for instance, there are nearly 100,000 Negroes. They are now in the Steel Workers Organizing Committee together with white workers, winning economic advancement for themselves and their families. This great movement in the trade union field will prove the most effective weapon against all types of discrimination. The Negro technician must increasingly come to see the lesson of the CIO, and, as it has proved effective in helping the Negro and white workers in industry, it will prove his ally in his attempt to get recognition in the professional and technical fields.

Continued from page eleven.

These, then, are some of the key questions arising from our activities of the past year—the professional societies, the unity of all independent and affiliated groups, our relationship to the industrial unions, educational work, our place in the political activity of labor, industrial structure within the Federation. There are others. But these will indicate why the Third Convention will be history-making. Our chapters will be represented by those who have demonstrated their fitness to do so, by virtue of their leadership, loyalty and intelligence. They represent the sum total of our membership, with its accumulated experience.

THESE STEEL FIRMS HAVE SIGNED CIO

THE Steel Barons read this list and weep for what was once the most notorious open-shop industry in America. In 1935 the Amalgamated Association

of Iron, Tin and Steel Workers had shrunk to 9200 members. Today, a year after the CIO went into this basic industry, 510,000 steel workers are under

union contracts with better wages, improved working conditions and union recognition.

This is compared with 140 firms which had signed with the union when the steel strikes began in May. The list follows:	the union when the ste	firms As of overing 40 firms	Augus ng near ms wh	coming st 26 th rly 500 ich had	into ere w 000 w	SWOC ere 399
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the union when the steel s The list follows:	trikes began in May.	ed With
Name of Company	Home Office	Employe
United States Steel Corporation Carnegie-Illinois Steel Corp. American Steel & Wire Compa. American Tube Company Tenn. Coal. Iron & R. R. Co. American Bridge Company Tenn. Coal. Iron & R. R. Co. American Bridge Company Acheson Manufacturing Company J. D. Adams Mfg. Company Adamson Paint Company J. P. Adamson Mig. Company Adamson Paint Company Alens-Standard Engineering Co. Alan Wood Steel Company Alled Steel Company Alled Steel Casting Co. American Abrasives Metals Co.	Pittsburgh, Pa	. 120,00
National Tube Company	ny Cleveland, Ohio Pittsburgh, Pa.	. 120,00 . 21,00 . 17,00 10,00
American Bridge Company	Pittsburgh, Pa.	6,00
Acheson Manufacturing Company	Rankin, Pa.	6,000 5,000 150
J. D. Adams Mfg. Company	Indianapolis, Ind.	. 60
Aetna-Standard Engineering Co.	Youngstown, Ohio	410
Alan Wood Steel Company	Conshohocken, Pa	. 2,500 7,500
Allied Steel Casting Co.	Harvey, Ill.	7,500
American Abrasives Metals Co.	(Pittsburgh, Pa.)	25
Amer. Brake Shoe & Foundry Co American Can Co.	· (Kansas Čity, Mo.) · · · · · Indianapolis, Ind	1,750
	(St. Louis, Mo.	
American Car and Foundry Co		
American Chain Company American Foundry and Mfg. Co.	Braddock, Pa St. Louis, Mo	100
American Foundry Equipment Co. American Iron and Supply Co	Fort Wayne, Ind Minneapolis, Minn	250
American Chain Company American Foundry and Mrg. Co. American and Supply Co. American Iron and Supply Co. American Iron and Supply Co. Railway Spring Dry. American Screw Company American Serew Company American Steel Band Company American Steel Band Company	Latrobe, Pa	. 900
American Shear Knife Company	Providence, R. I	. 300
American Steel Band Company	McKees Rocks, Pa.	250
American Steel Foundries	Granite City, Ill.	7,000
	East St. Louis, Ill. Newark, N. J	
American Stove Co	Lorain Ohio	. 900
Anchor Steel and Conveyor Co	. Detroit, Mich	. 150 . 75
Josiah Anstice and Company	. Rochester, N. Y	2,500
Armstrong Products Corporation	Apollo, Pa. Huntington, W. Va.	1,600 450
E. C. Atkins Company	Brooklyn, N. Y	200 700 250
Atlantic Stamping Company	Rochester, N. Y.	250 180
Automatic Sprinkler Company	New York City	180 200 125
Babcock & Wilcox Company	Avonmore, Pa	2,500 35
Barlow & Seelig Mfg. Co	Ripon, Wis.	35 400 400
Belanger Fan & Blower Co	Detroit, Mich.	400 90 400
Bellmont Iron Works	Philadelphia, Pa	400 380
Frank S. Betz Company	Hammond, Ind.	. 90
Birmingham Stove and Range Co.	. Birmingham, Ala	380 50 90 135 425 125
Black, Sivalls & Bryson, Inc		. 100
Blaw-Knox Steel Company	Blaw-Knox, Pa.	3,000
Braeburn Alloy Steel Company	Pittsburgh, Pa.	3,000 300 350
Brown Stove Works, Inc	Cleveland, Tenn.	1,700 250 50
American Welding and Mfg. Co. Anchor Steel and Conveyor Co. Andrews Steel Corporation Josiah Anstice and Company Apollo Steel Company Atlantic Foundry Company Atlantic Responsibility of the Company Atlantic Stamping Company Company D. H. Baird Company Barlow & Seelig Mfg. Co. Bearings Company of America. Bellet Company Bellmont Iron Works Otto Bern. Company Inc. Frank S. Betz Company Inc. Frank S. Betz Company Sign Company Steel Company Sign Company Sign Company Sign Company Sign Steel Company Sign Sign Sign Sign Sign Sign Sign Sign	Harvey, Ill. Buffalo, N. Y. Buffalo, N. Y.	. 980
	Buffalo, N. Y.	100 100
Buffalo Sash Weight and Foundry Company Butler Brothers Brasco Mig. Company Browning Manufacturing Co. A. M. Byers Company Lewis Campbell, Jr., Inc. Canton Malleable Iron Company. Canton Stamping and Enameling Company	.Buffalo, N. Y. .Cooley, Minn. .Harvey, Ill.	50 550
Brasco Mfg. Company		. 950
A. M. Byers Company Lewis Campbell, Jr., Inc.	Bovertown Pa	350 1,700 55
Canton Malleable Iron Company Canton Stamping and Enameling	Canton, Ohio	375
Canton Malieable Iron Company Canton Stamping and Enameling Company Canton Stamping and Enameling Company Caterpillar Tractor Company Caterpillar Tractor Company Caterpillar Tractor Company Caterpillar Tractor Company Champion DeArment Tool Co. Cantral Foundry & Machine Co. Central Tube Company Chain Belt Co. Champion-DeArment Tool Co. Champion-DeArment Tool Co. Champion-DeArment Tool Co. Champion-DeArment Co. Champion-DeArment Co. Champion-DeArment Co. Columbia Steel Company Colourbia Steel Tank Co. Columbia Steel Tank Co. Columbia Steel Tank Co. Columbia Steel Shafting Company Company Connells Villa Mil. & Mine Supply Company Connells Mil. & Mine Supply Company Continent Can Company Company Company Continent Can Company Co	Canton, Ohio Canton, Ohio Peoria, Ill. Ellwood City, Pa. Warwood, W. Va. Fort Wayne, Ind. Ambridge, Pa. Milwaukee, Wis.	500
Cavert Wire Company Center Foundry & Machine Co	Ellwood City, Pa Warwood, W. Va	11,000 75 125
Central Foundry Co	. Fort Wayne, Ind	40 850
Champion-DeArment Tool Co	. Milwaukee, Wis	1,065 75
eling Company	.Chattanooga, . Tenn	225
Chicago-Hutchins Corporation Chicago Malleable Iron Company	Hyde Park, Pa Chicago, Ill.	500
Geo. M. Clark & Co. Cleveland-Tennessee Enamel Co	Harvey, Ill	500 400 350
Clayton & Mark Steel Company	Chicago, Ill	350 500 150
Colonial Iron Works	Duluth, Minn	140 75
Columbia Steel Equipment Co.	. Kansas City, Mo	435 120
Concrete Products	McKees Rocks, Pa.	400 40
Connellsville Mfg. & Mine Supply	Camden, N. J	65
Continental Can Company	East St. Louis, Ill.	40 400
Continental Screw Company	New Bedford, Mass	900 200
Coolerator Corporation	Duluth, Minn.	3,800 875
Copperweld Steel Company	Glassport, Pa.	2,500 500
B. Cottrell & Sons Co	Milwaukee, Wis.	135
rescent Forge & Shovel Company frown Pipe & Foundry Company	Havana, Ill.	250
runden Martin Mfg. Company	St. Louis, Mo.	360
Concrete Steel Company Connellsville Mfg. & Mine Supply Company Company Company Continental Can Company Continental Gin Company Continental Gerew Company Continental Gerew Company Continental Servew Company Continental Servew Company Control Company Collegator Concompany Collegator Concompany Collegator Concompany Collegator Company	Harrison, Jersey City,	14.00
Smoothle Ct1 C	N. J.	14,000
rucible Spring Company	McKees Rocks, Pa	325
Detroit Sheet Metal Works	Decatur, Ind.	250 150
lenry Disston & Sons, Inc	Philadelphia, Pa.	2,100
Priver-Harris Company	Newark, N. J.	75 700
uluth Iron and Metal Company	Duluth, Minn.	100
lliott Company	Jeannette, Pa.	700
rucible Sering Company or America rucible Spring Company vertical for the company of the company	Etna, Pa	150
rdle Perforating Company	Rochester, N. Y.	50
rie Forge & Steel Coxolon Company	Erie, Pa	350
airmont Machinery	Fairmont, W. Va	175

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	Falls Stamping and Welding Co.	Cuyahoga Falls, Ohio	15
	Falls Stamping and Welding Co. Fearless Dishwashing Mchry. Co Federal American Cement Tile Mfg. Co.	Rochester, N. Y	. 15
	Mfg. Co. Federal Cash Register Co. Federal Enameling and Stamping Company	Kansas City, Mo	. 60 1 80
	Federated Metals Company	Pittsburgh, Pa.	101
	Fein's Tin Can Company Ferro Alloys Company Ferro Enamel Company Ferro Machine and Foundry Co. Filer & Stowell Company Firth-Sterling Company	Brooklyn, N. Y	200
	Ferro Machine and Foundry Co.	Cleveland, Ohio	1,000 200
	Firth-Sterling Company Foster Brothers Mfg. Co	McKeesport, Pa	
		St. Louis, Mo. J	450 150
	Fort Pitt Spring Co. Fort Pitt Steel Castings Company	Flemington, N. J McKees Rocks, Pa McKees Rocks, Pa McKeesport, Pa	480 150 400
	Foran Foundry Fort Pitt Malleable Iron Company Fort Pitt Malleable Iron Company Fort Pitt Spring Co. Fort Pitt Steel Castings Company Foster Brothers Mig. Co. Foster Bros. Manufacturing Co. Gary Screw & Bolt Company Thomas S. Gassner Company General American Car Transpor-	Utica, N. Y	250 200
	Thomas S. Gassner Company General American Car Transpor-	Philadelphia, Pa (East Chicago, Ind.)	350 60
	Thomas S. Gassner Company General American Car Transpor- tation Company Gisholt Machinery Company Goslin-Birmingham Mfg. Company Goslin-Birmingham Mfg. Company Jos. Greensports Son Pipe Co. Grieff Brothers Co. Griffin Wheel Co. Griffin Wheel Co. Griswold Mfg. Company Griswold Mfg. Company Griswold Mfg. Company Hammond Steel Company Hammond Brass Works Hamcock Manufacturing Company	(Masury, Ohio) Madison, Wis	2,000
	Gould Coupler Corporation Grabler Mfg. Co.	Birmingham, Ala	1,000
	Jos. Greenspon's Son Pipe Co Grief Brothers Co.	National City, Ill, Portsmouth Ohio	1,000 75 150
	Griswold Mfg. Company Guibert Steel Company	Erie, Pa	80 400 40
	C. Hager & Sons Hinge Mfg. Co. Hamilton Steel Company Hammond Brass Works	St. Louis, Mo. Indiana Harbor, Ind.	350 175
	Hammond Brass Works Hancock Manufacturing Company Handlan, Inc. Hanlon-Gregory Galvanizing Co. Hanlon-Gregory Galvanizing Co. Harlison Bolt and Nut. Company Hart & Crouse Co. Inc. Havana Metal Wheel Company Havkinsmith Wheel & Mine Car Hecker Products Mfg. Co. Hecker Products Mfg. Co.	New Cumberland, W. Va. St. Louis, Mo.	200 100 60
	Hardwick Stove Company Harrison Bolt and Nut Company	. Pittsburgh, Pa	60 150 900 50
	Hart & Crouse Co., Inc. Havana Metal Wheel Company	Utica, N. Y. Havana, Ill.	250 250
	Company Hecker Products Mfg. Co	Irwin, Pa	125 350
	Company Hecker Products Mfg. Co. Heekin Can Co. Heil Company Helmick Foundry Machine Co.	Irwin, Pa. Indianapolis, Ind. Norwood (Cincinnati), O. Milwaukee, Wis. Fairmont, W. Va. St. Louis, Mo. Hammond, Ind. Indianapolis, Ind. Indianapolis, Ind. Hammond, Ind.	550
	Herman Body Company Hoess Brothers Co.	St. Louis, Mo.	55 150
	M. A. Hofft Mfg. Co. Holcomb & Hoke Mfg. Company	Indianapolis, Ind Indianapolis, Ind	50 50 250 75
	Homestead Valve Mfg. Co	Hammond, Ind	700
	Hunter Steel Company Huther Bros. Saw Mfg. Co	Pittsburgh, Pa. Rochester, N. Y.	300 75
	Indiana Steel and Wire Company Industrial Sheet Metal Works, Inc	Muncie, Ind	500 150
	Heigh Can Co. Heigh Company Machine Co. Heigh Company Machine Co. M. A. Hofft Mfg. Co. Holcomb & Hoke Mfg. Company W. J. Holliday Company W. J. Holliday Company G. Holliday Company Hunter Steel Company Hunter Steel Company Huther Bros. Saw Mfg. Co. Imperial Knife. Inc. Indiana Steel and stal Works. Inc Ingalls Iron Works. Ingram-Richardson Company	Birmingham, Ala Verona, Pa	350 140
	Ingram-Richardson Company International Conveyor and Washer	Beaver Falls, Pa.	1,300 75
	International Cooperage Company International Nickel Company	Niagara Falls, N. Y Huntington, W. Va.	1.800
	Jeannette Steel Corporation Jessop Steel Company	Birmingham, Ala Jeannette, Pa	150 100 400
	Jewell Alloy and Malleable Co Jones & Laughlin Steel Corporation	Buffalo, N. Y	150 27,000
	Ingram-Richardson Company International Conveyor and Washer International Cooperage Company International Nickel Company International Nickel Company Jaffe-Wohl Iron and Metal Co. Jeannette Steel Corporation Jessop Steel Company Jessop Steel Company Jewell Alloy and Malleable Co. Jewell Alloy and Malleable Co. Joseph Steel Company Joslyn Mfg. and Supply Co. Joseph Steel Company Kellogg Compressor and Mfg. Co. Kingston Products Company Kilme Slove Amunfacturing Co. John C. Kupferle Foundry Co. John C. Kupferle Foundry Co. John C. Kupferle Foundry Co. Lake City Iron and Metal Co. Lasalco, Inc. Latrobe Electric Steel Company	Griffith, Ind	265 90 200
	Kickhaefer Manufacturing Co Kingston Products Company Kline Stove Co.	Milwaukee, Wis Kokomo, Ind.	50 600
	Knapp Bros. Manufacturing Co. John C. Kupferle Foundry Co.	Philadelphia, Pa. Joliet, III. St. Louis, Mo. Buffalo, N. Y. St. Louis, Mo. Latrobe, Pa. Decatur, III. Minneapolis, Minn. Monongahela, Pa.	94 150 150
	Lake City Iron and Metal Co. Lasalco, Inc. Latrobe Electric Steel Company Leader Iron Works, Inc. Lewin Mathas Company Liggett Spring & Axle Company. Lippmann Engineering Company Geo. B. Limbert Co.	Buffalo, N. Y St. Louis, Mo	30 75 700
	Leader Iron Works, Inc.	Decatur, Ill.	65 50 125
	Lippmann Engineering Company Geo. B. Limbert Co.	Minneapolis, Minn. Monongahela, Pa. Milwaukee, Wis. East Chicago, Ind. Springfield, Ill. Chattanooga, Tenn.	50
	Lippmann Engineering Company Geo. B. Limbert Cong. Company Geo. B. Limbert Cong. Company Lucey Boiler and Mfg. Company Lucey Boiler and Mfg. Company Lukens Steel Company Lukens Steel Company MacIntosh-Hemphili Company Mason Can Company Mason Can Company Mason Harris Company Masser Harris Company Master Metal Products, Inc. Mathers Stock Car Co.	Springfield, Ill	50 90 60 150
	Lukens Steel Company MacIntosh-Hemphill Company	Chattanooga, Tenn. St. Louis, Mo. Coatesville, Pa. Pittsburgh, Pa.	3,100 600 60
	Mason Can Company Massey Harris Company	Coatesville, Pa. Pittsburgh, Pa. Detroit, Mich. East Providence, R. I. Batavia, N. Y. Buffalo, N. Y. Chicago Ridge and East St. Louis, Mo.	60 300 500
	Master Metal Products, Inc. Mathers Stock Car Co	Buffalo, N. Y. Chicago Ridge and East	120
	McCabe Powers Auto Body Co. McCauley Metal Products, Inc. McKaig Hatch Co. Inc. The McKay Company McKessport Tin Plate Company McKessport Tin Plate Company Meadville Mailand Mechanical Handling Systems any Metal Door and Frame Company Metal Door and Frame Company Medal Company Metal Door and Frame Company Metal Door and Frame Company Milling Metal Metal Metal Milling Metal Metal Milling Meta	St. Louis, Mo	80 60 190
	McKaig Hatch Co., Inc	Buffalo, N. Y	240 300
	McWane Cast Iron Pipe Company Meadville Malleable Iron Company	Birmingham, Ala Meadville, Pa	3,200 500 300
	Metal Door and Frame Company Geo. J. Meyers Manufacturing Co.	Detroit, Mich	150 210
	Michigan Seamless Company Milwaukee Brass Mfg. Co	South Lyons, Mich Milwaukee, Wis	1,200 275 200 60
	Mirific Products Company Missouri Rolling Mill Company	Canton, Ohio	40 350
	Modell-Friedman Steel Corp Molybdenum Corp. of America Monessen Foundry Company	Detroit, Mich	135 125
	Morrow Manufacturing Company Mullins Manufacturing Company	Wellston, Ohio Salem, Ohio	175 60 2,000 75
-	Munson McCairns Foundry Co P. H. Murphy Company	St. Louis, Mo	75 40 100
	National Bearings Metals Corp National Can Company	Pittsburgh, Pa Maspeth, L. I., N. Y	160 1,000
	Company	Granite City, Ill.	775 325
-	National Gypsum Company National Iron Company National Lead Company	Buffalo, N. Y. Duluth, Minn.	1,200
	Metal Door and Frame Company Geo. J. Meyers Manufacturing Co. Mitchigan Seamiess Company Mitchigan Seamiess Company Milwaukee Reliance Bolier Works Mirific Products Company Modell-Friedman Steel Corp. Molybdenum Corp. of America Molybdenum Corp. of America Morrow Manufacturing Company Multiplex Faucet Company Multiplex Faucet Company Multiplex Faucet Company Autonia Bearings Metals Corp. P. H. Murphy Company National Bearings Metals Corp. National Enameling & Stamping Company National Eric Corp National Formany National Hopsum Company National In Company National Sign Company	Cicero, Ill.	5,500 250
1	National Smelting & Refining Co National Standard Company	Detroit, Mich	50 40 100
1	National Steel Equipment Mfg. Co National Supply Co	Philadelphia, Pa	50
,	John J. Nesbitt, Inc.	(New York City) Philadelphia, Pa.	120 200
1	Newcomb David Company, Inc.	Detroit. Mich	200 200 75
1	North End Foundry Company	St. Louis, Mo	180 100 75
1	Northwestern Barb Wire Company The Ohio Galvanizing & Mfg. Co.	Sterling, Ill. Niles, Ohio	1,500
000	Ontario Malleable Iron Company Oster Manufacturing Company	Ontario, Canada Cleveland, Ohio	700 200
(National Lead Company National Malleable and Steel Cast- ing Company National Malleable and Steel Cast- ing Company National Smelting & Refining Co. National Smelting & Refining Co. National Steel Equipment Mfg. Co. National Steel Equipment Mfg. Co. National Supply Co. Newart Mg. Company Nagara Blower Company Nagara Blower Company National Supply Company National Supply Company National Supply Company National Supply Co. N	Milwaukee, Wis	400

Overly Manufacturing Company Pacific Car and Foundry Compa Pacific Steel Boiler Corporation Page Steel and Wire Company Palmer-Bee Copmany Paper Calmenson Company and Subsidiaries	Greenshurg Po	
Pacific Car and Foundry Compa	ny Renton, Wash.	50 975 120
Page Steel and Wire Company	Bristol, Pa	120
Palmer-Bee Copmany	Detroit, Mich.	1,200
Palmer-Bee Copmany Palmer Jee Copmany Paper Callmenson Company and Subsidiaries Subsidiaries Subsidiaries Palmer Subsidiaries Palmer Subsidiaries Palmer Steel Company Penn Metals Company Penn Metals Company Penn Metals Company Pennsylvan Castings ompany Pennsylvan Company Predider Company Predider Company Pheoli Manufacturing Company Pheoli Manufacturing Company Philibs Mine & Mill Supply Co. Pittsburgh Brad Tank Co. Pittsburgh Brad Tank Co. Pittsburgh Pipe & Coupling Co. Pittsburgh Serew & Bolt Co. Pittsburgh Steel Condition Steel Co. Pittsburgh Steel Foundry Co.	Duluth & Superior Minn	450
Parkersburg Rig and Reel Co Patterson Foundry & Machine C	Parkersburg, W. Va	450 425 125 100
Peerless Steel Equipment Co	Philadelphia, Pa.	125
Penn Iron & Steel Company	Creighton, Pa.	350
Penn Steel Castings Company	Chester. Pa	350 400 400 150 250 250 500 160
Pennsylvania Lawn Mower Worl	ks. Primos, Pa.	150
Pfaudler Company	Rochester N V	250
Pheoll Manufacturing Company	Chicago, Ill.	500
Phillips Pump and Tank Co.	Cincinnati Obio	160
Pittsburgh Bridge & Iron Works	s. Rochester, Pa.	80 175
Company Engineerin	Pittsburgh Pa	
Pittsburgh Pipe & Coupling Co.	Allison Park, Pa	60 125
Pittsburgh Spring and Steel Co	Pittsburgh, Pa	125
Pittsburgh Steel Company	Monessen & Allenport, Pa	7,000
Pittsburgh Tube Company	Glassport, Pa.	850
Faustic B. Bloomb G.	(Philadelphia Pa)	350
Fayette R. Flumb Co	··· \ St. Louis, Mo. }	285
Powell Pressed Steel Company	Philadelphia, Pa	40
Pressed Steel Tank Company	Milwaukee, Wis	350 650
R. & C. Can Company	St. Louis, Mo	160
Reading Iron Company	Reading, Pa.	600 1,350 770
Reed & Prince Manufacturing Co	Worcester, Mass	770
Reliance Steel Products Company	Rankin, Pa.	200 150
H. H. Robertson Company	Hatboro, Pa.	650
Rochester Smelting & Refining C	Co. Rochester, N. Y.	350 75 275
Rotary Electric Steel Co	Indianapolis, Ind	275
Russell Burdsall & Ward Bolt &	&	500
Ruud Mfg. Co.	Sterling, Ill.	400 575
Samuel Stamping & Enameling C	o. Chattanooga, Tenn.	370
Sanitary Refrigerator Company .	Fond du Lac, Wis	200
William B. Scaife Sons & Co	Oakmont, Pa,	150 450
W. E. Schaefer & Sons Co	Ripon, Wis	. 9
Schmieg Sheet Metal Works	Cleveland, Ohio	250 100
Scullin Steel Company	St. Louis, Mo 1	,100
Pittsburgh Steel Company Pittsburgh Steel Foundary Co. Pittsburgh Tube Company Fayette R. Plumb Co. C. B. Perter Co. C. B. Perter Co. C. B. Perter Co. C. C. C. Company Pressed Steel Tank Company Reading Into Company Reading Steel Products Company Reliance Steel Castings Company Reliance Steel Products Company Reliance Steel Products Company Reliance Steel Products Company Samymetal Products Company Samymetal Products Company Samymetal Products Company Schmieg Sheet Metal Works Scullin Steel Company Schmieg Sheet Metal Works Scullin Steel Company Schlieg Sheet Metal Works Scully Steel Products Company	(Chicago, Ill.	800
G. I. Sellers & Sons Company	Flyood Ind	
Semier Company	Jeannette Pa	300 250
Seyler Manufacturing Company . Sharon Steel Corporation Sharon Tube Company	Pittsburgh, Par	125
Sharon Steel Corporation	Sharon, Pa. Lowellville, Ohio	,000
Sharon Tube Company	. Sharon, Pa.	200
Henry Siehert Sons Inc.	Youngstown, Ohio	35 130
Smith & Davis Mfg. Company .	St. Louis, Mo.	170
John E. Smith Sons Company	Milwaukee, Wis.	
South Bend Lathe Works	South Bend, Ind.	75 500 650 75
South Chester Tube Company	. Chester, Pa.	650
Southern Car Wheel Company	. West Homestead, Pa	150
Spang-Chaifant & Company Spoehrer-Lange Company	Pittsburgh, Pa 4.	000
Standard Stamping Company	St. Louis, Mo.	50 200
Standard Steel Spring Company Standard Steel Works	. Coraopolis, Pa.	650
The Star Drilling Machine Co	Akron, Ohio	125 160
Stearns Magnetic Mfg. Co Sterling Machinery Corn		50
Sterling Steel Castings Company	East St. Louis, Mo	150
St. Louis Car Company	. Braddock, Pa	200 700
Sharon Steel Corporation Sharon The Company Sheet Metal Mig. Company Sheet Metal Mig. Company Henry Silebert Sons. Inc. Smith Selet Foundry Company John E. Smith Sons Company Southern Car and Mig. Company Southern Car and Mig. Company Suthern Car Wheel Company Spange Chalfant & Company Standard Stanping Company Standard Stale Spring Company Standard Steel Spring Company Standard Steel Works The Star Drilling Machine Co. Sterling Machine Co. Sterling Steel Works The Star Drilling Machine Co. Sterling Steel Castings Company Sterling Steel Foundry Corp. St. Louis Car Company Sterling Steel Foundry Corp. St. Louis Car Company Sterling Steel Foundry Corp. St. Louis Car Company With Subsidiaries Superior Sheet Steel Company Superior Sheet Steel Company Superior Sheet Steel Company Superior Sheet Steel Company	Indianapolis, Ind.	800
Superior Machine & Tool Company with Subsidiaries Superior Sheet Steel Company Superior Tank Co. Symington-Gould Corp.	Kokomo Ind	240
Superior Sheet Steel Company	Canton, Ohio 1,	000
Symington-Gould Corp.	Ransas City, Mo Rochester, N V	600
Taylor-Wharton Co		
Those Charol Garage	High Bridge, N. J.	900
Thew Shovel Company Timken Roller Bearing Company, Timken Steel & Tube Company Tippton-Woods Company Toppend Company	Lorain, Ohio	700
Timken Steel & Tube Company	Canton, Ohio 12, Phillipsburg, N. J. Beaver Falls, Pa. Midland, Pa. Trenton, N. J. Pittsburgh, Pa. Cleveland, Ohio Jeannette, Pa.	000
Tippton-Woods Company Townsend Company Treadwell Construction Company Trenton Spring Products Company Tri Lok Company Triplex Screw Company W. W. Truxell Foundry Union Electric Steel Company Union Metal Manutacturing Co. Union Spring and Mfg. Co.	. Phillipsburg, N. J	125
Treatment Construction Company .	Midland, Pa.	350
Tri Lok Company	Pittsburgh, Pa	90
Triplex Screw Company	Cleveland, Ohio	200 50
		50 150
Union Metal Manufacturing Co	. Canton, Ohio	300
Union Metal Manufacturing Co Union Spring and Mfg. Co. Unit Stove & Furnace Co. United Engineering & Foundry Co United Engineering & Foundry Co United Screw and Bolt Company. United States Sanitary Mfg. Co Usona Mfg. Co.	Rirmingham Ala	800 250
United Engineering & Foundry Co	Pittsburgh, Pa 2,	300
United States Sanitary Mfg. Co.	. Cleveland, Ohio	200 100
Usona Mfg. Co.	St. Louis, Mo.	100
The Van Huffel Tube Corp.	Youngstown, Ohio	250
Vilter Manufacturing Company	. Milwaukee, Wis.	100
Valley Steel Products Co	. Louisville, Ky	700 125
United Screw and Boit Company United States Sanitary Mig. Co. Usona Mig. Co. Usona Mig. Co. Usona Mig. Co. The Van Huffel Tube Corp. Vilter Manufacturing Company Henry Vogt Machine Company Valley Steel Products Co. Vulcan Rivet and Boit Company Valley Steel Products Co. Vulcan Rivet and Boit Company Walter Mig. Co. Walworth Company Walters Mig. Co. Walworth Company Washington Tin Plate Company Weaver Manufacturing Company West End Iron and Metal Co.	Birmingham, Ala	135
Wald Manufacturing Company	Wilkes-Barre, Pa	100
	Oakmont, Pa	
Washington Tin Plate Company	. Washington, Pa	550
West End Iron and Motal Co	Springfield, Ill.	45 150
Wald Manufacturing Company Walters Mfg. Co. Walworth Company Washington Tin Plate Company Weaver Manufacturing Company West End Iron and Metal Co. West Virginia Rail Company	Greensburg, Pa. 2,6 Washington, Pa. Springfield, III. Duluth Minn. Huntington, Wa. Washington, Wa. Wheeling, W. Va. 20,0 Buffalo, N. Y. Utica, N. Y. Chicago, III. Swaukegan, III. Oakmont, Pa. Johnson,	000
Wheeling Steel Corporation	Wheeling W Va	225
J. H. Williams & Co.	Wheeling, W. Va 20,0 Buffalo, N. Y 8	900
Williams Steel Wheel & Rim Co Wilson & Bennett Company	Utica, N. Y	80
Wisconsin Axle Company	Chicago, Ill.	000 000 .50
Wordings Verona Tool Works Worcester Pressed Steel Company	Oakmont, Pa 1	50
a readed sieer company.		
Worthington Pump and Mach. Co		100
Worthington Pump and Mach. Co Young Brothers Co. Youngstown Steel Car Corp.		100 100 150
West Virginia Rail Company Wheatland Tube Co. Wheeling Steel Corporation J. H. Williams & Co. Williams Steel Wheel & Rim Co. Williams Steel Wheel & Rim Co. Williams Rennett Company Wisconsin Axle Company Wisconsin Axle Company Worksteel Company Worthington Pump and Mach. Co. Young Brothers Co. Youngstown Steel Car Corp. J. A. Zurn Mg. Co.		100 150 150 150
Worthington Pump and Mach. Co Young Brothers Co. Youngstown Steel Car Corp. J. A. Zurn Mfg. Co.		50 50

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